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MASTER'S THESIS

China's Rare Earth Monopoly: A Study of the U.S. Discourse

Author	LEE CHI SIN
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Supervisor:	Mgr. Martin Riegl, PhD
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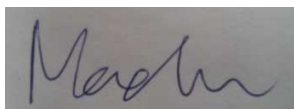
**Institute of Political Studies
Faculty of Social Sciences
Charles University in Prague**

Date: 2015/06/15

Author:	Lee Chi Sin (Max)	Supervisor:	Mgr. Martin Riegl, Ph.D
E-mail:	maxlee_91@hotmail.com	E-mail:	riegl@fsv.cuni.cz
Phone:		Phone:	
Specialisation:	GPS	Defense	
		Planned:	

Notes: The proposal should be 3-5 pages long and sent to martinriegl(et)email.cz.

Proposed Topic: China's rare earth monopoly: a study of the U.S. discourse

A handwritten signature in blue ink, appearing to read 'Max', on a light-colored background......
Candidate.....
Supervisor *

Date signed: 2015/6/15

Title (proposed): China's rare earth monopoly: a study of the U.S. discourse

Supervisor: Mgr. Martin Riegl, Ph.D

Key concepts: Rare Earth Elements, discourse, China threat, US dependency, national security

Introduction

Rare earth elements (REE) have ascended to the international political foray in such short time that is incomparable to other issues. (Ting & Seaman, 2013) Its connection to an incident in the South China Sea in 2010 which resulted in an alleged embargo by China against Japan as a geopolitical leverage revealed the saliency or sensitivity of resources in international relations. Moreover, this has become a component in justifying conventional wisdom that China is a revisionist power in international politics. The 'reactive assertiveness' in China's approach in consolidating its territorial integrity with the recent land-reclamation in the disputed territories in the South China Sea is a representation of the many attributes which justify the conviction that this emerging Asiatic giant will not be peaceful. The foreign policies of Beijing are examined through the paradigm of positivism by scholars.

The most cited theoretical toolkit used to analyze the insurmountable intentions of China is the power transition theory. It posits that the rise of a power necessitate the decline of the existing hegemonic state. The rising state, thus, poses a threat to an existing established order. This status quo, as it is being challenged, is often being reasserted in order to maintain the hegemonic peace. In today's terms, this means that China's is causally linked to the decline of the United States as a superpower. The strategy of integrating China to IO (international organisations) such as WTO proved to be a failure of the Liberal Theory of History because of the unforeseeable political reform or democratization resulting from economic liberalization. (Nymalm, The End of the 'Liberal Theory of History'? Dissecting the US Congress' Discourse on China's Currency Policy, 2013) Furthermore, the connections made between today's China that is dissatisfied with the current status quo is perceived to be reshuffling the order by pragmatic assertive policies and the German Empire in late 19th century is almost serving as a basis for requiring a resolute response from the U.S. in order to maintain the status quo. This dichotomy which exists in the differences of China to the U.S. needs to be questioned for its precariousness for it could lead to deterioration of relationships between the two countries. Through the study of this particular case that involves buzzwords such as 'resource competition' or 'resource race', the knowledge/power nexus can be examined in a micro-level that is being propagated by discursive models employed in the production of 'timeless' knowledge.

Post-positivist approach

Reflectivist approaches argue for the rejection of the analogy between social sciences and natural sciences. The reason is that social sciences involve interpretation whilst natural sciences do not in the production of knowledge. Thus, interpretative theories oppose the claim of objectivity in the scientific approach. 'Facts' are subjected to interpretation and description in the social world. As a general challenger to cognitivism of observable and objective reality, they contend that positivist's epistemological base of dualisms in subject and objective knowledge is constituted by the social. (Ryan, *Post-Positivist Approaches to Research*, 2006) (Laclau & Mouffe, 1987) Reality is not one but a multiple 'reality' with multiple truths. Thus, emphasis is put on experience and interpretive methods which pulls back the relevance of a realist ontological approach to construe legitimate knowledge. Furthermore, David Campbell posits that the world exists independently of language, but we can never *know* that (beyond the fact of its assertion), because the existence of the world is literally inconceivable outside of language and our traditions of interpretation. (Campbell, 1998). By the same token, an object is 'something' (obtains meaning) only to the extent that it establishes a system of relations with other objects, and these relations are not given by the mere referential materiality of the objects, but instead, they are socially constructed. (Laclau & Mouffe, 1987) However, this does not mean that an object does not exist if it does not integrate within this system of relations. Rather, any object can exist independently from any system of social relations. But they can *become* objects or obtain new meaning if assigned to a new system of relations. Diamonds, for example, become the commodity with added material value when it is assigned to the determinate system of social relations. They become valuable when presented in jewelry stores whereas the same object can have different values at another location or system of meaning, for example, in the mines. (Laclau & Mouffe, 1987) An example in International Relations (IR) theory, Alexander Wendt's famous contention of how anarchy is socially constructed in an established relationship between states. 'Anarchy is what states make of it.' (Wendt, 1992)

Discourse

Discourse as a system of relations constructs the meaning of an object. This totality of linguistic and extra-linguistic elements constitute the structures of signification and relations that construct social realities. (Milliken, *The Study of Discourse in International Relations: A Critique of Research and Methods*, 1999) However, there are more than one definition and utilization of this term albeit they operate on the same paradigm found in the post-positivist realm of theorizing reality and production of knowledge. John Paul Gee provides a definition that encompasses many aspects discourse could be explained and understood before allowing researchers to create a framework of analysis in their critical studies.

“[Discourses], crucially involve (a) situated identities; (b) ways of performing and recognizing characteristic identities and activities; (c) ways of coordinating and getting coordinated by other people, things, tools, technologies, symbol systems, places, and times; (d) characteristics ways of acting-interacting-feeling-emoting-valuing-gesturing-posturing-dressing-thinking-believing-

knowing-speaking-listening (and, in some Discourses, reading-and-writing, as well)" (Gee, 2005, p. 33)

As mentioned previously, meaning is compounded out of cases of a word's use that entails the importance of pragmatics (total operation). However, the meaning is also only ascribed by the contexts of actual use of the term and as Gee puts it that *all meaning is local 'on site' and are influenced by the social and discursive practices* – every identity or discursive object is constituted in the context of an action. (Milliken, 1990) Since contexts are not given naturally, they are constituted by what Gee calls Discourse models in which the institutionalised, largely unconscious theories that humans hold to aiding our perception of the world. They are simplified, 'assumptions' and 'experiences' that governs our behaviour and social interactions. The existence of discourses means the existence of other discourses too. Because it requires the establishment of a relationship between contrasting elements in order to realise the existence of an object. Therefore, a discursive totality is never closed nor complete. (Laclau & Mouffe, 1987) (Ashley, 1989) Since there is never a closed totality, there are bound to be subjected to subversion by contingency and counter-discourses. These discourses are reproduced constantly as 'repetition of acts' that reinforces the production of knowledge and truth. So, it necessitates the continual reproduction in face of difference. (Ashley, 1989) Other popular research interests within discursive studies include hegemony and identity. Both are relevant in the study of politics and scholars tend to have a focus of either one. Laclau and Mouffe focuses on how a discourse achieves hegemony in their seminal work *Hegemony and Socialist Strategy* detailing the discursive struggles that gave a foundation for radical democratic movements. David Campbell's *Writing Security* instead focused on the construction of political identity with a genealogy of the American identity based on a dichotomy of difference which explained the contemporary social consciousness during the Thirteen Colonies and later the Post-War conditions in which America happens to find itself without an ideological archenemy and the subsequent redefinition of its role in world politics further justifying its interventionist policies.

The arguments found in the former's work is on hegemonic and discursive struggles which will be a crucial aspect for examination because revealing the contesting discourses can help explain the origins of a hegemonic truth because it had been normalised. In the latter's work, the focus on identity can help explain justifications in foreign policies because of the articulation of difference in constructing an identity. In David Campbell's words, "identity is not fixed by nature, given by God, or planned by intentional behavior. Rather, identity is constituted in relation to difference. Moreover, the constitution of identity is achieved through the inscription of boundaries that serve to demarcate an 'inside' from an 'outside', a 'self' from an 'other', a 'domestic' from a 'foreign'." (Campbell, 1998, p. 9)

Aims

REEs have become a strategic resource in the U.S. and other nations that are importing them for a wide array of applications. There are 17 of these metals found in the periodic table and some are in higher demands than others. Nonetheless, these resources are not rare at all despite the word 'rare' that is attached to them. REEs are abundant on the earth's surface and can be extracted around the world. The assigned 'rarity' or the attribution of 'rareness' to the elements arose from the fact that they are difficult to produce. The process of mining to a finished product is long and costly. Processing a specific element as a metal or oxide can damage the environment with radioactive wastes and corrosive chemicals that leaves mining or processing areas in dire conditions and infertile soils. This leaves the land unsafe for growing food or simply for people to inhabit in, rendering the site a barren waste land. The production of REEs to products is essential to modern conditions. Civilian uses include the use of powerful REEs magnets or other related products used for a wide range of advanced technologies, they include smart phones, televisions, hard-drives for computers, wind turbines and car engines. The more controversial side of this element is the role it plays in also the production of military technologies that uses the powerful magnets that has REEs inside. The securitisation of REEs or its ascension to become a strategic material for national security arguably has origins from this specific aspect, albeit it will be later proven that civilian uses dominate the percentage of consumption whereas defense consumptions of REEs is merely a fraction of the total percentage. The alleged embargo by China on REE export drew worldwide coverage and later academic studies over this 'resource competition'. The entire process began with a frantic media sensation depicting China as 'having stranglehold over Western countries' which is then followed by the augmenting the issue as a national security concern with an extended study by the US DOD (United States Department of Defense). This is then responded by U.S. congressional pressures on various departments urging the need to secure these materials for national security. However, this sensation soon dissipated without any further impact on the consciousness of the public. Stories of REEs became rare and depictions in the similar fashion of the 'tragedy of the commons' followed suit.

The story of the REEs case serves as an example of how a small narrative can be an attribute, as part of its construction, to the reproduction of the American identity as well as a hegemonic discourse on China posing negative 'difference' in the discursive sense. This reproduction serves as a process of representation of the dichotomy of self and other, a political identity that justifies the existing power structures. Throughout my studies, I shall formulate a succinct research programme that fits for the purpose of my research goals. Using a compound discourse analysis method from a range of scholarly work, my aim is to combine the best and most useful methodological toolkits utilized by various authors and then apply them to my research.

The research questions and aim that I seek to answer are the following:

1. How did the discursive construction of China's monopoly and subsequent 'national security threat' come about since the fishing trawler incident?

2. The discursive construction could be traced through the lens of identity, specifically the reintroduction of U.S.'s identity in light of the pivot to Asia in 2011. To what extent did this influence the justification of labelling China as the 'boogeyman'?
3. Has the specific 'threat' posed by China's monopoly been dissipated since the announcement by Molycorps and other Western mining companies of progress in the mining efforts to alleviate US dependence over Chinese exports?
4. If not, how powerful is this discourse in continuation of U.S. efforts to commit itself to break free from dependence?

Hypothesis

- a) The REEs case is another 'hyped up' one created by the US given the existing Western discourses on China that it is a threat. The US response is a resolute move to bolster its claim to be an important and 'indispensable nation' in the Asia-Pacific region, hence the pivot to Asia in 2011.
- b) This case serves to justify the post-war identity reshape that the U.S. seeks since the 90s and now it has entered a new phase with the pivot to Asia after a disastrous practice of foreign policy in the Middle East. It is another identity building task in relations with existing conflictual discursive elements over which how the U.S. foreign policy direction should be heading.
- c) By legitimizing further presence in Asia, the U.S. is justifying its expansion of democracy, neo-liberalism and cooperation with developing countries as well as existing partners in the region so that it remains relevant in the years to come.
- d) In order to this, there needs to be a strong articulation of the differences that poses as a challenge to the U.S.'s role. China is assigned with the identity as the boogeyman or 'bully' in the region because it is perceived to be a growing power seen in its geopolitical moves and it is 'flexing its muscles' against smaller nations around it in order to establish its own primacy. The U.S. self-assigns the role of peacekeeping and the subsequent lawsuit at WTO demonstrates its role to be a guarantor of 'international justice'.

Preliminary structure (Order of components)

1. Title Page
2. Copyright page
3. Abstract

4. Dedication, Acknowledgements, Preface
5. Table of contents
6. Introduction (Case of the REE presented – the ‘traditional’ narrative)
7. Methodology (Discourse analysis)
 - a. and paying homage to literatures – Gee, Laclau & Mouffe, Campbell, Ó Tuathail)
 - b. Data collection and justification
8. Discourse analysis & discussion– genealogy of a China monopoly on REE – construction/justification and the argumentation (the hype/media frenzy)
 - a. Identity of US in relation to China (Why? What purpose? Aims?)
 - b. Process of articulation and hegemonic achievement
 - c. Post-hype and residue ‘strength’ of discourse (60 Minutes segment as epilogue)
9. Conclusion
10. References
11. Appendices

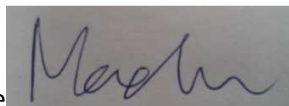
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DECLARATION:

I hereby declare that this thesis is my own work, based on the sources and literature listed in the appended bibliography. The thesis as submitted is 33043 keystrokes long (including spaces), i.e. 145 manuscript pages.

Your name Lee Chi Sin

Your signature

A rectangular box containing a handwritten signature in blue ink. The signature appears to be 'Lee Chi Sin' written in a cursive, stylized script.

Date 13-05-2016

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1.1 Introduction

This thesis aims to contribute to the existing literature of critical geopolitics and the customary approaches to analysing discourses of classical geopolitical thinking. It seeks to problematize and critically examine ways in which geopolitical knowledge are constructed and scripted in a linear narrative. In this case, the choice of an issue that is unconventional by the standards of studies in inter-state relations or international politics in general can bring new insights to how micro-settings are connected to a macro-structure of narrative and ideologies that are perpetually being reinforced. Further, it will be argued later on that however ‘small’ or minute an issue stand to be and despite the overhaul by institutional forces to shine a spotlight on this particular topic, it serves as a useful example to how issues like rare earths are part and parcel to the grandiose project of renarrativising spaces of danger and perpetuation of the Cold War mentality that the West and especially the U.S. is endowed to as the only hegemonic power. It will be noted also, however, that this particular way to examine geopolitical thinking and culture of a particular subject can be transposed to another country. Instead of tackling primarily the Western scripting of danger, it can be useful to examine also other self-generated fears and securitisations of certain issues or objects or peoples in any geomorphic entities. Future studies do not have to be restricted to a particular sovereign state (as government positions may ‘officially’ be restrained from making bold claims) nor does it have to be a subject of choice that is circulated much.

Researchers in the IR community examining the People’s Republic of China (PRC) focus on the Taiwan issue; the expanding capabilities of the People’s Liberation Army; maritime and territorial disputes in the South and East China Seas; and a host of other issues that are pitted against the West, especially the United States. Debates over whether China’s ‘rise’ or

'emergence' will be peaceful or not dominate the intellectual discussions over the past twenty years (Mearsheimer, 2006 ; Scott, 2008; Jacques, 2009; Buzan, 2010; Glaser, 2011) and have given new purposes into examining phenomena such as the power-transition theory; it also gave birth to the China Threat Theory in the 2000s due to the country's enormous economic transformation. However, there must be a disclaimer to be established as this is not an attempt to justify a particular country's policies or to demonise it. This does not mean that the current trends of environmental degradation China pursues with its lax governance over the REEs industry is sustainable, nor is it an attempt to legitimise actions of either governments in their naming or framing to be just in the policies. But rather, it calls for deeper reflection of how narratives and 'global' problems are presented in uncritical ways without the consideration of a vast range of other possible actors or factors that contribute to a particular event or situation. This stems from the fact that geopolitical representations are driven not only by states but also through academic institutions and through popular channels; these ideas that comprise the intellectual enterprise of critical geopolitics will be further explored in the methodology chapter and literature review.

1.2 Research topic, questions and hypotheses

Rare earth elements (REEs) have ascended to the international political foray in such short time that is incomparable to other issues. (Ting & Seaman, 2013) Its connection to an incident in the South China Sea in 2010 which resulted in an alleged embargo by China against Japan as a geopolitical leverage revealed the saliency and sensitivity of this particular resource in international politics. Moreover, the issue has become a component in justifying conventional wisdoms that China is a revisionist power in international politics. The "reactive assertiveness" found in China's approach in consolidating its territorial integrity with the recent land-

reclamation in the disputed territories in the South China Sea is a representation of the many attributes which justify the conviction that this emerging Asiatic giant will not be peaceful. Again, the aim of this thesis is not to defend the position of China or to define its intentions regarding its defence spending or its rare earth policy; rather, it is to examine how this particular issue is scripted in various ways by multitudes of actors concurrently in an overarching discourse. It seeks to examine the way in which China's share of the REEs market (it exported 96% of world demand in 2005) was scripted to be a 'threat' or a concern to national security. By national security it is the entities or issues that are perceived to be against the survival and sovereignty of a country, and in this particular topic it is the national security of the United States that is discussed. With the aims defined there are several research questions which were presented in the proposal and are still relevant to answer in spite of slight changes to the way that the topic was addressed at the beginning of the research process that began more than twelve months ago. The initial research questions helped to guide the specific timeframe and content to analyse by using the methods posed in discourse analysis and are as follows:

1. How did the discursive construction of China's monopoly and subsequent 'national security threat' come about since the fishing trawler incident?
2. The discursive construction could be traced through the lens of identity, specifically the reintroduction of U.S.'s identity in light of the pivot to Asia in 2011. To what extent did this influence the justification of labelling China as the 'bogeyman'?

A quick redress is needed in the research questions as the 'national security' threat that REEs poses happen to occur *prior* to the fishing trawler incident as this will be explored later.

1. How was the discursive construction of China's monopoly achieved *before and after* the fishing trawler incident in 2010?
2. The second question transcends both *pre* and *post* fishing trawler incident so it remains suitable and awaits for discussions because the geopolitical identity is crucial *vis-à-vis* China as the 'bogeyman'.

In view of the research questions, it can be argued that there is neither specific labelling of the responsibility resting on a particular actor in framing China as the monopoly nor a single driver of the discourse. This is because the research will take into account of different scales that help produce geopolitical narratives; again, this will be explored further in the proceeding chapter. Through a lengthy study of diverse sources several points appear to be distinctive as revealed by the complexity of this issue that may not be explained fully which may end up being biased. The representation of China as the 'monopoly' power and a resource hungry giant can be explained through a critical view which reveals that:

- a) The REEs case is an example of US identity building task specifically its geopolitical role.
- b) The construction of the narrative of China using REEs as political leverage is a dichotic labelling task in justifying the Cold War mentality in explanation of 'post-Cold War' global issues, problems of which are scripted narrowly to perpetuate the Chinese threat.

Whether or not the U.S. government is sponsoring such accusations of China being a rare earth 'monopoly' power with the causal connections to geopolitical disputes in East Asia is not a question this thesis is trying to answer. Rather, to study the discursive construction is more important as it will later be demonstrated that it is the political consequences of joint efforts by multiple actors regardless of their intentions. With this remarked it is safe to say that the majority

of the hypotheses would hold sway even if the government is not endorsing it specifically because the discourse is carried through by multitudes of actors and they help to assign roles and missions in order to further the constructed national interests and national security. It can be argued that this discourse has proven to be overtly powerful in reinforcing the American telos of history; one that is based on its fundamental values and founding myths. All of which will be explored in the proceeding chapters of the thesis.

1.3 Traditional narrative of REEs

REEs, rare earth elements, are a group of elements that are relatively abundant (Greinacher, 1981; Hedrick J. , Rare earths, 1994). There are 15 REEs principally located within the lanthanides category of the periodic table with the addition of yttrium and scandium (Humphries, 2010). (See figure 1) The reason behind terming the elements as 'rare' is due to the fact that they are not found as free floating elements separate from minerals in natural form and are difficult to extract from economically. (Hedrick J. , Rare earths, 1994; Barrett & Dhesi, 2001; UNCTAD, 2014) There are several stages required to process REEs to their applicable form. First, REEs ores are mined from mineral deposits and they are extracted principally from bastnaesite and monazite. Next, the ores are separated from the minerals into oxides for further processing into metallic form. Before they could be used they are converted into alloys and magnets. REEs in alloy form and as magnets have vast array of applications both commercially and militarily.

Rare earths have been proved useful for petroleum fluid cracking catalysts, automotive catalytic converters, and permanent magnets, while phosphors for television, X-ray intensifying, and lighting. (Hedrick J. , 1995; Long K. R., 2011)The military technologies that utilises REEs include precision guided missiles or smart bombs. (Hedrick J. , 2005) Diverse types of missile systems include usage of REEs in motors, actuators and fins. Lasers using neodymium:yttrium-

aluminum-garnet (Nd:YAG) are also used in improved accuracy for electronic gun sights in tanks, satellite communications that are in geosynchronous or geostationary orbit. REEs derived magnets such as Neodymium-iron-boron (NdFeB) (**see figure 2**) permanent magnets are used in various military components such as aircrafts, displays, radar systems, coatings, optical equipment, sonars, computer systems and electronic counter measures. (Hedrick J. , 2004) Furthermore, the application of REEs is extended to the realm of environmental and green technologies. Renewable energy source such as wind turbine motors uses neodymium; energy efficient fluorescent lamps use REEs and can reduce significantly the carbon emissions of automobiles. (Haxel, Hedrick, & Orris, 2002; Hayes-Labruzzo, Schillebeeckx, Workman, & Shah, 2013)

REEs were first discovered in Sweden due to large deposits there in the 18th century. Both Yttrium and Ytterbium are named after a Swedish town Ytterbia where minerals containing REEs were first discovered. In the US, Mountain Pass in California became the mining base for the development of the trade and production of REEs since the 1940s during a nation-wide search for uranium mine pits. (Hurst, 2010a) The first large-scale use of rare-earth metals occurred in 1903 with the development of iron-bearing mischmetal (a natural mixture of rare-earth metals) in a pyrophoric cerium-rich alloy (ferrocium) for lighter flints. (Hedrick J. , 2000) In the 1960s, REEs were beginning to be utilised for vast range of commercial purposes, cerium and praseodymium/neodymium were used for polishing glass optics. Europium was used as red phosphor in colour television. (Greinacher, 1981) Magnets derived from REMs have strong magnetic powers and are small in size which precipitated the technological revolutions of the 1990s; and they continue to be a driving force behind miniaturised computer chips. Other technologies that use REEs derived magnets include ultra-lightweight headphones for cassette

and disc players; all of which contain neodymium and samarium. From 1960s to 1980s, the Mountain Pass, CA was the dominant supplier (Haxel, Hedrick, & Orris, 2002) of REEs and the US was self-sufficient.

Since 1990s domestic production in the US declined significantly due to environmental concerns as well as cheap REEs and REMs prices from China. (Haxel, Hedrick, & Orris, 2002) This led to the shutdown of processing and production plant of Molycorp in 1998 followed by overall ceasing of operations in 2002. (UNCTAD, 2014) On the contrary, production from China increased from 55,000tns in 1996 to 73,000tns in 2000 (Hedrick J. , 2001; Tse, 2011), and to 98,000tns by 2004. (Hedrick J. , 2004) The volume of China's production and export of REMs soared significantly due to domestic competition and increased demands between 2000 and 2009. **(See figure 3)** Mines of REEs are scattered around the country but the majority of the mining and production are based in Baiyan Obo, Inner Mongolia. **(See figure 4)** By 2009, China became *de facto* miner, producer and exporter of REEs occupying 97% of world trade, with the US, Japan, Germany and France as key importers. (Hayes-Labruzzo, Schillebeeckx, Workman, & Shah, 2013; UNCTAD, 2014) Furthermore, China accounted for 95 percent of global REE production despite having only 36 percent of identified world reserves. **(See figure 5)**

However, in spite of China's position as the top producer and exporter since 2004 this was not sustainable due to the fact that extraction and separation process of REEs entails enormous environmental costs. (State Council, 2012) Radioactive wastes from tailings decimated the mining and production areas; lax governance and poor regulations have attributed to polluting tailings spilling into the inhabited areas of mining regions affecting the local population (State Council, 2012). Concerns over the ecological degradation alarmed policymakers in Beijing which subsequently sought to control this industry by initiating a restructure of the industry in

2002 with the China Northern Rare Earth Group and a China Southern Rare Earth Group but to no avail (Wubbeke, 2013). Other problems include over-exploitative practices with small illegal mines and processing plants; lack of research and development of REMs and end-product applications in comparison to international levels, this effectively restricts China from advancing up the scale ladder of innovative technologies and retaining its status as exporter of cheap, low-end products that characterises a majority of its other industries. Furthermore, smuggling of REMs by local producers was identified as the prime causes of lowered prices that ran inconsistent with the production value. This was due to the fact that production was scattered nationwide without a monopolized production as seen in other countries. (Wubbeke, 2013) Since 2005, the Chinese government continued to impose export quotas that decreased exports significantly. Between 2005 and 2007, the Government quota allocated more than 40,000t of rare-earth production to domestic producers and traders and about 16,000t to Sino-foreign joint-venture producers (Tse, 2011). In 2008, the National Plan for Mineral Resources Plan was issued in order to exercise tighter control over the production and export of REMs by imposing quotas and adjusted tax rates for REEs in order to prevent from over-exploitation given the depletion of its own reserves. (State Council, 2012) In the second tranche of the export quota allocated in July 2010, the Chinese government allocated a total of 7,976t divided between 6,208t to domestic and 1,768 t to Sino-foreign, compared with a total of 26,427t divided by 16,267t to domestic and 10,160t to Sino-foreign in 2009. (Tse, 2011) Finally, prices of REEs remained low for a long period due to unregulated production but sharply increased by 2010 due to the export quotas. From 2000 to 2010, prices rose by 22.5 fold from \$10/kg to \$25/kg (State Council, 2012).

REEs came under the limelight of the international press in late 2010 and subsequently drawn into the realm of high politics in the aftermath of the collision between a Chinese vessel

and the Japanese coast guard near the disputed Senkaku or Diaoyue Islands. The Chinese crew were promptly detained by the Japanese authorities and this resulted in a diplomatic spat between the two countries. Reports of a Chinese embargo halting REEs exports to Japan in retaliation of the prolonged detention of the Chinese captain circulated in the international news media, however, claims of the embargo was denied by the Chinese government itself. Nevertheless, the linkage between China and its uses of economic and resource restriction in order to pursue its geopolitical aims alarmed the world because of the realisation of the fact that China was the *de facto* sole exporter of these 'rare' resources. The world was suddenly woken up to the fact that modern conditions were dependent on a single supplier of these precious elements essential to high tech products. Japan, the largest importer of REEs, sought for alternatives by recycling materials in order to make up for the halted supplies and US import dependence of Chinese exports became increasingly worrisome as multitudes of defence technologies require components that use REEs and that there was no alternatives found in other elements. Prices of REEs skyrocketed between July 2010 and July 2011 with 300 to 500 percent. (Ting & Seaman, 2013) Calls for reestablishment of domestic mining, production and supply diversification of REEs within the US were answered with Congressional legislations and commercial reinvigoration of mining operations headed by Molycorps. Nonetheless, China's export restriction of REEs became the focal point as the threat since both China and the US seemed at odds with each other over a host of other issues and that China's moves prompted a reassertion of US presence in the Asia-Pacific region. In 2012, the US, EU and Japan filed a complaint at the WTO against China for its export restriction and tariffs imposed on the REEs trade. This was fittingly followed by the announcement of the 'pivot to Asia' in the same year.

1.4 Outline of the thesis

The outline of the proceeding chapters are conducted in the format that was employed in papers written for political and social sciences. However, the theoretical and methodological frameworks, in this case, are rather different from conventional sense because of the differences in paradigmatic thinking. Chapter two begins with a discussion of the shift from positivist thinking to a reflectivist approach. As it is a discourse analysis, there will be a justification and examination of why this approach is used that deviates from the traditional ontological and epistemological foundations that have served in the study of international politics and geopolitics. Several authors' approaches in employing discourse analysis in both sociological studies and international politics will be discussed in definition of discourse, namely James Paul Gee, Jennifer Milliken, Ernesto Laclau and Chantal Mouffe. This is then followed by an introduction of critical geopolitics and connections to its usage particularly in discourse analysis as Martin Muller argued that both are synonymous in the study of geopolitics and the construction of geopolitical identities. The connection between critical geopolitics and the use of a particular theoretical framework purported by Laclau and Mouffe are highlighted as the components that give rise to a highly critical study of linguistic and social practices of discourse that bring about specific sets of identities which can be employed to enrich the studies of discursive construction in traditions found in geopolitical thinking. Concrete examples include borrowing from both the works of Gearóid Ó Tuathail and David Campbell's discursive studies of constructed political identities that are argued to be articulatory practices that spatializes danger, the constitutive outside as well as the innate 'Other' in efforts to demarcate between 'them' and 'us'. Through this, the identification of other spatialisation practices that are not restricted to the realms of tradition or classical geopolitics over territory will be achieved through a study of these practices

in different realms that concerns the political apparatus and subsequently the geopolitical identity of the US. These include the emergence of geoeconomics, resource conflict and 'green wars', all of which concerns the topic of choice. With respect to sources, the choices that were used in this studies by pooling in 'scales' found in the makeup of geopolitical thinking are the targets of discursive studies. This takes on the customary examples of other scholars who have employed analogous methods as their basis for research of their own choice. Finally, the chapter concludes with a reflection of the stated methodological proceedings as well as the main critiques of this particular approach.

Following the methodological chapter is the literature review where the previously identified scholars who wrote seminal works on critical geopolitics and the discursive construction of identities are reviewed. They are arguably the providers of literary inspirations for this research subject because of the ways in which the emancipatory guidance for deeper understanding of certain social and political phenomenon that are traditionally marginalised or simply disregarded as deviant. Equipped with this critical mind-set, the topics of contention regarding geopolitics of resource competition, economic nationalism and identity politics are presented in this part to offer insights as to how the scholars had achieved the success of their studies as offers to the deconstructivist spirit that were pioneered by prominent writers such as Edward Said who wrote seminal works that transcends eras and are still very relevant to studies of international politics and geopolitics today. Throughout, the US geopolitical identity of the post-Cold War is examined.

The main part of the discourse analysis will be in chapter 4 wherein the defined methodological proceedings will be utilised in examination of the REEs case that was outlined above with the focus on the US. It will take up on multifaceted sources and months of research

and examination to find the articulatory practices in order to answer the research questions that were laid out. Through the analysis there will be recall of the topics that were identified to be attributes to the continuously flowing signifying practices that are driving the discursive construction and reconstruction of the American identity as a nation-state as well as the ideological baggage that is *sine qua non* to the examination and documentation of world politics in a sovereign-like voice. This arguably restricts the voices of the others as they were deemed to not fit into a particular teleology. The study will be concluded with a follow-up discussion of whether the main hypotheses hold true and then followed with a critical reflection of the overall achievement of this research programme.

2. Theoretical and methodological chapter

2.1 Theoretical framework

This chapter outlines the theoretical framework and methodology that are employed in writing this thesis. As stated in the preliminary research questions and hypotheses, the aim is to critically analyse geopolitical scripts and their construction. In order to do so require employing an approach that diverges from traditional positivism found in most studies of international affairs. In this case, the focus will be on the discursive construction of the REEs threat from China in the perspective of the West and especially the U.S. It accuses China, based on this rationale, of being a rare earth monopoly power in reinforcing its own geopolitical calculations in East Asia. The approach used here challenges the 'scientism' of mainstream IR and it aims to consider the manifest political consequences of adopting one mode of representation over another. (Campbell, 1998, p. 7; Milliken, 1999) This chapter will also explain the approaches that are employed previously by scholars of discursive studies in international politics as well as critical geopolitics and how they are to be applied into the topic of choice. Firstly, there will be a discussion in how the ontology and epistemology diverges from the positivist tradition to a reflectivist approach. In doing so, it seeks to outline the philosophical basis of how reality is constructed and the political consequences that came about with this postulation. Secondly, there will be a discussion of theories of discourse analysis and its utilisation in critical geopolitics based on the understanding from the readings of previous scholars. This is then followed by a survey of how sources are collected for analysis. Finally, it will be concluded with a critical reflection over this particular approach highlighting the possible criticisms.

2.2 Shifting from positivism to post-positivism

Studies of political sciences have been dominated by the positivist tradition since its inception. The 20th century saw the maturity of political sciences as a discipline with geopolitics and international relations as the forerunners in explaining political sociology and strategies. In conventional wisdom, positivist methodologies found in natural sciences are used also in social sciences as well as in political sciences. Its epistemological base consists of objective, empirical and scientific ways to arrive at knowledge that helps to explain perceived reality. (Ryan, 2006, p. 15; Friedrichs, J.; Kratochwil, F., 2009) The emphasis on using rigorous scientific method and language to investigate human experiences as well as human interaction is what defines positivist methodologies. These include empirical data gathering, quantitative data analysis, experimentation based on hypothesis, theory building and theory testing. (Kelly, 2006, p. 26) Only the use of such methods can a researcher arrive at objective facts and thus able to fill the void that is often a demanding sets of questions asking what constitutes our realities.

However, post-positivism (or reflectivist approach) has garnered significant forces in the intellectual field for the past 30 years which poses a challenge to the dogmatic schema found in positivist's camp. Reflectivist approaches argue for the rejection of the analogy between social sciences and natural sciences. The reason is that social sciences involve interpretation whilst natural sciences do not in the production of knowledge. Thus, interpretative theories oppose the claim of objectivity in the scientific approach. 'Facts' are subjected to interpretation and description in the social world. As a general challenger to cognitivism of observable and objective reality, they contend that positivist's epistemological base of dualisms in subject and objective knowledge is constituted by the social. (Laclau & Mouffe, 1987; Ryan, 2006) Reality is not one but a multiple 'reality' with multiple truths. Thus, emphasis is put on experience and

interpretive methods which challenges the relevance of a realist ontological approach to construe legitimate knowledge. Furthermore, the world exists independently of language, but we can never *know* that (Campbell, 1998) - beyond the fact of its assertion - because the existence of the world is literally inconceivable outside of language and our traditions of interpretation. By the same token, an object is 'something' (obtains meaning) only to the extent that it establishes a system of relations with other objects, and these relations are not given by the mere referential materiality of the objects, but instead, they are socially constructed. (Laclau & Mouffe, 1987) However, this does not mean that an object does not exist if it does not integrate within this system of relations. Rather, any object can exist independently from any system of social relations. But they can *become* objects or obtain new meaning if assigned to a new system of relations. Diamonds, for example, become the commodity with added material value when it is assigned to the determinate system of social relations. They become valuable when presented in jewelry stores whereas the same object can have different values at another location or system of meaning, for example, in the mines. (Laclau & Mouffe, 1987)

2.3 *Introduction to discourse*

Discourse as a system of relations constructs the meaning of an object. This totality of linguistic and extra-linguistic elements constitute the structures of signification and relations that construct social realities. (Milliken, 1999, p. 229) However, there are more than one definition and utilization of this term albeit they operate on the same paradigm found in the post-positivist realm of theorizing reality and production of knowledge. John Paul Gee provides a definition that encompasses many aspects discourse could be explained and understood before allowing researchers to create a framework of analysis in their critical studies.

“[Discourses], crucially involve (a) situated identities; (b) ways of performing and recognizing characteristic identities and activities; (c) ways of coordinating and getting coordinated by other people, things, tools, technologies, symbol systems, places, and times; (d) characteristics ways of acting-interacting-feeling-emoting-valuing-gesturing-posturing-dressing-thinking-believing-knowing-speaking-listening (and, in some Discourses, reading-and-writing, as well)” (Gee, 2005, p. 33)

As mentioned previously, meaning is compounded out of cases of a word's use that entails the importance of pragmatics (total operation). However, the meaning is also only ascribed by the contexts of actual use of the term and as Gee puts it that *‘all meaning is local ‘on site’ and are influenced by the social and discursive practices’* – every identity or discursive object is constituted in the context of an action. (Milliken, 1999, p. 226) Since contexts are not given naturally, they are constituted by what Gee calls Discourse models in which the institutionalised, largely unconscious theories that humans hold to aiding our perception of the world. They are simplified, ‘assumptions’ and ‘experiences’ that govern our behaviour and social interactions. The existence of discourses means the existence of other discourses too. This is because it requires the establishment of a relationship between contrasting elements in order to realise the existence of an object. Therefore, a discursive totaliy is never closed nor complete. (Laclau & Mouffe, 1987; Ashley, 1989) Since there is never a closed totality, there are bound to be subjected to subversion by contingency and counter-discourses. These discourses are reproduced constantly as ‘repetition of acts’ that reinforces the production of knowledge and truth. So, it neccestates the continual reproduction in face of difference. (Ashley, 1989)

Discourse analysis is garnering more attention as a research practice in the discipline of international relations. However, there has been no consensus amongst scholars over which

methodological approach within discourse analysis can be employed in order to achieve a formalised result or scientific validation that would satisfy the objectivism that positivism seeks. Also, this community of discursive studies within the field of international relations does not yet have a paradigmatic school of thought that meets Kuhn's criteria. (Milliken, 1999, p. 226) The simple answer is the fact that its ontology and epistemology are entirely different from modern approaches. Hence, it is infamously labelled as 'deviant science'. The study of discourse draws on Saussure's theory over which the meaning of things are provided within a relationship of sign systems. Despite the claimed lack of scientism in this method, there is already an array of literature that contribute to this intellectual enterprise, and several distinctions can be made with respect to the customary approaches to studies of discourse in IR. Following Derrida's conceptualisation of a *binary opposition* that are constitutive in constructed social reality, works such as David Campbell's seminal book *Writing Security* (1998) provides a pioneering piece of literature over the construction and reproduction of the American political identity. His interpretative approach sees *theory-as-practices* and theory of IR as one instance of pervasive cultural practices that serve to discipline ambiguity. (p. 20) The system of signification of the American identity draws likewise to the boundary creation found in the power/knowledge nexus that consolidates 'truth'. Based on this, the concept of the West/Third World or East is constantly rearticulated in order to reinforce ideologies and geostrategies found in foreign policies as well as domestic politics. This approach is also adopted in critical geopolitics by Gearóid Ó Tuathail in which the classical geopolitical thoughts and the development of geography as a discipline were deconstructed and criticised as instruments of imperialism. This is then applied to a succinct analysis of how spatialisation occurred and grandiose geopolitical visions created in writing about international affairs from the American perspective.

2.4 Identity and State

Defined in Hegellian terminology, identity is never closed but constituted as transitional and relational. (Grier, 2008; Adair, 2012) By that it means identity is placed in relation of difference. This is achieved through inscription of boundaries serving to demarcate an “inside” from an “outside”, a “self” from “Other”. (Campbell, 1998, p. 9) It draws likewise with the absence of pre-determined ontological status of “things” without the assigning of meaning. Foreign policy is itself an exercise in boundary-making that is central to the production and reproduction of identity. The theoretical claims of discourse analysis help to define this practice that structures in binary oppositions of the Derridan sense (West/East). As Laclau and Mouffe points out, all identities are constituted by positing a difference (the relational difference) which help to reinforce and challenge identity at the same time. Thus, it is impossible for the absence of “Other” to constitute the “Self”. In a similar manner the powerful thesis that *Orientalism* presents, the term Orient nor the concept of the West has any ontological stability; each is made up of human effort, partly affirmation, partly identification of the Other. (Said, 2004, p. 870) Such performative constructions of identity are achieved by “play of practice”. (Milliken, 1999, p. 230) As discourses are unstable and never closed, it requires “articulation” and “rearticulation” of the knowledge and identities in order to fixate it to a regime of truth and to assign it as ahistorical.

Returning to the “state”, since it is not ontologically privileged and merely exists in absence of relational difference, the embodiment of this imagined community necessitates “ritualised performances” and “formalised practices”. (Campbell, 1998, p. 128) Discursive construction of problems in the pathological sense demarcates boundaries and reinforces barriers which reassert particular identities. Issues are problematized and medicalised in the Foucaudian

sense shed light on such practices that are critical to the sovereign voices of the state and governmentality.

Historically, Western identity carried ethnoreligious background but the religious part had been largely displaced during the Enlightenment. “Rationality” and “the reasoning man” replaced religious justification for authority or monopoly of violence. The constant reconstruction of the American identity is the perfect example of a discursive production of identity at the realm of the state. Its identity is at an apparent constant state of flux, existentially threatened and securing its own “survival”, thus, necessitates representation and mapping of dangers. Whether or not the “threats” are externally induced or not does not account for the fact that identities are innately unstable. Furthermore, as self-proclaimed the beacon of liberal democracy and freedom, the idealistic virtues found in its interpretation of history, one of divine providence, are deterritorialised which justified the early republic’s continental expansion during the 19th century. “Civilising” missions endowed with this specific teleology rejected pre-colonisation history, thus, stripping historical representation of “Indians” as they were deemed to be barbaric and uncivilised. Efforts to preserve the identity of the early republic necessitated the “Othering” of ethnic groups perceived to be inherently ‘different’ from White Christians. An example in the domestic sphere was the Chinese Exclusion Acts of 1882 whereby the “Yellow peril” was signified to be a threat to the American identity hence the rejection of incoming labourers and their families from settling in the U.S. These figurations of differences reinforce the self-identification regulated by ideals help discipline forthcoming ambiguities provided through ritualised signification processes. There are further discussions over the American identity and the engineered representation of the ‘outside’ in the next chapter.

2.5 Critical Geopolitics

Critical geopolitics is a problematizing poststructuralist theoretical enterprise that questions the existing structures of power and knowledge found in geopolitics. (Ó Tuathail, 1999, p. 107) It is an investigation of world politics through examination of discourses that are used by elites and publics actively constructing the spaces of political action that are then the medium for politics of states and other actors. (Agnew & Ó Tuathail, 1992, p. 193; Agnew, 2010, p. 569) Ó Tuathail highlights that this critique of classical geopolitics strives to expose the power politics behind Western institutions to scrutiny. This critical way of reading problematize ways in which geopolitics as a conceptual object is written, and ideological inscriptions that assign a certain identity - through repetition - and coherence. (Ó Tuathail, 1996, p. 143) Geopolitics is seen as a series of practices within civil societies of Great powers that sought to explain the meaning of the new global conditions of space, power and technologies; a combination of such imagining with technologies to exercise power in new world order of 'closed space'. (Ó Tuathail, 1996) It holds a type of reasoning that appeals to geographical 'evidences' and 'imperatives' to justify the particular foreign policy of a state and concerned with creating the image of control and permanence over a global spatiality that is always potentially in flux. (Agnew, 2010, p. 570) The ways in which it is depoliticised represented a variant of political *realism*, of which it enlists geographical factors to write wars as inevitable. (Ó Tuathail, 1996, p. 54) Within the study of critical geopolitics there are three forms of understanding geopolitics: (1) Practical geopolitics emphasizes the utilisation of geographical factors in reflection to applied policies by state institutions and practitioners. (2) Formal geopolitics is the academic enterprises and public intellectuals which practices spatialisation in an authoritative voice. (3) Popular geopolitics is the

everyday experiences of the public consciousness succumbing to geopolitical ideas generated from public discourses such as media, books, films, televisions, newspapers, magazines.

Ó Tuathail's success in introducing an emancipatory study of critical geopolitics is derived from his critique of Western writings of political spaces. He does so by exploring the foundations of the disciplines of geography and political geography as imperial instruments of the British Empire. In the 1992 book *Critical Geopolitics*, he outlines the ways in which spatialisation was achieved in the format that was described above and sketches the repetitive acts by Western institutions to legitimise foreign policies and how demarcations were drawn. Drawing similarly to the studies by Edward Said's *Orientalism*, Ó Tuathail offered an unprecedented way to critically examine how the productions of spaces as political dramas were scripted so as to further the interests of Western countries by articulating distinctively the 'Otherness'. Calls for Critical Geopolitics were responded with supplements such as exploration of hegemony in popular culture and geopolitics. (Sharp, 1993; Dalby, 2008; Dittmer & Dodds, 2008)

Linking Critical Geopolitics to Discourse Analysis

Critical geopolitics examines the construction of geopolitical imaginations and identities. (Müller M. , 2008) As discourse is defined as socio-practices in systems of difference and construction of meaning reality through articulatory practices, geopolitical discourse is drawn upon and used by officials and leaders to constitute and represent world affairs. (Ó Tuathail, 2002, p. 607) The continuity found in practices of statecraft in reimagining new threats to mark boundaries so as to maintain the coherence of the imagined community with control of territories; these practices demarcate the 'outside' and the 'inside' which reinforces ideological aspirations and necessitates the essentialisation of the foreign. Thus, it seeks to discipline space and arrest ambiguity with the help of constant identity building tasks.

The social space is within the discursive construction process in creating meaning because it is the geomorphic entity that is already within the relational difference with the constitutive 'Outside'. Thus it is not restricted to the linguistic sphere but rather it *is* the Discourse model purported by Gee. Based on this understanding, it operates as a social interaction with the inclusion of multitudes of social actors. This is then connected to the different realms of geopolitics for which the three - practical, formal, popular - encompasses various potential actors that represent the social space of the discourse. Thus, the examination of discursive construction of geopolitical imaginaries and identities would be justified in taking on-board inter-societal actors that contribute (sometimes compete) within the articulatory practice.

The central tasks of critical geopolitics as identified by Martin Müller contends the need to analyse *identity* as constituted within a discourse that is naturalised and how these hegemonic articulations established it. The discourse theory by Laclau and Mouffe provides an analytical toolkit that is suitable for multifaceted studies of geopolitics. It comes in three folds: (1) "the *discourse apparatus* conceptualises the creation, transmutation and fixation of meaning through discourses within a hierarchical, relational and situationally contingent structure. (2) The *identity apparatus* is primarily concerned with the construction of meaning and subjects' identification with different subject positions. (3) The *politics apparatus* finally accounts for the radical, post-Marxist edge of the discourse theory by introducing the concept of hegemony." (Müller M. , 2010, p. 9)

In flow of what Gee conceptualises as discourse models being conceived as social practices and identity being discursively inscribed, spoken and enacted as Campbell also holds, it allows the recognition of *geopolitical identities* being situated productions. Signifying practices and signifiers are the meanings partially and temporarily fixated in discourse that are embedded

in institutional practices of micro-settings. (Müller M. , 2010, p. 13) The main contribution of this is to describe the hegemonic voice and the repetition of the *geopolitical identities* through logics of difference and equivalence, exposing nodal points which pose a potential threat to the particular discourse. Finally, in words of Müller, to introduce the concept of hegemony paves way to *tackle ideologies as effects of discursive hegemony*. (Müller M. , 2010, p. 13) The exclusionary practices will also be included in tandem with the structural forces which seek to arrest flow of differences and other meanings. (Laclau & Mouffe, 1985, p. 112)

Critical readings of geopolitical identities and traditions necessitates consideration of different localities of geopolitics, thus, its agents have to be examined in detail. The autonomous state of governments strategically employing discourses in foreign policy practices entails the total freedom of the governmental elites as acting agents which can be called as agency concept in critical geopolitics. (Müller M. , 2008, p. 325) In discourse, individuals can only acquire meaning if they identify themselves with the positions that discourses construct and thereby become subjects. The identity of the subject cannot be conceived independently of its inscription into discursive surfaces. (Müller M. , 2008, p. 327) The analysis needs to begin from the point of view of the rules that come into play in the very existence of such discourses rather than from the agent's position. (Müller M. , 2008; Dodds, Kuus, & Sharp, 2013, p. 7) Actors, thus, are not truly independent from which discourse they can strategically employ to identify themselves in relations to the 'Other' and that they are already within the discursive forces driving the identity distinctions. The social practices found in discourse models are not external as suggested but entire networks of discourse models help organize the thinking and social practices of sociocultural groups or a state. Thus, one can see a semi-structural 'constraint' that usurps the independence of the agent which is emphasized in traditional critical geopolitics and that it is a

process of change and continuity that has no temporal limits. Actors do not deploy discourses as strategic weapons in creating the 'otherness' but are part of the discourse already! They are only relaying the existing discourse that has already come into play within the international social realm. Critical geopolitics' analytical task is to investigate and explain spatialisation both in territorial and non-territorial form. Thus, it seeks to broaden the analysis beyond the state.

The *geopolitical identity* of the U.S. is challenged by China's 'rise' and the People's Republic represents the dislocation, the constitutive outside and is made responsible for in the logics of equivalence and difference. The logic of equivalence creates equivalent identities through the negation of other discursive systems – other groups – by subverting the differential character within the own discourse or in-group. (Laclau & Mouffe, 1985, p. 132; Nymalm, 2013, p. 392) Internal differences become equivalent to being opposed to a common 'Other'. The external 'Other' represents the fundamental opposition that constitutes the Self. United States as leader of the free-world, liberal democracy and free trade is pitted against the ideologically different China, a communist authoritarian government with state capitalism and is illiberal. Signifiers of lack provide the articulatory practices; in Laclau and Mouffe's studies it was 'order'. In Nymalm's survey, it was 'fairness' functioning as empty signifier in examination of China's currency manipulation and its reception at the US Congress. Finally, Campbell's seminal work presented the different strategies of identity building tasks through discourses of danger that details the "pathogenic" problems that plagues domestic social order function as signifiers. These included "civilisation" and "sovereignty versus anarchy".

In this case, it will be several *signifiers* that are utilised in examination of the restructuring of the U.S. *geopolitical identity*. "Monopoly", "dominance" and "dependence" serve as the main components of the articulatory practices. These *signifiers* of a lack or empty

provide a common point of reference which mitigates the challenging difference. The differences seen here are largely limited and as contingency they are the deviant voices that attempt to legitimise China's rationale for pursuing policies to ensure its industrial sustainability.

'Monopoly' signifies the absence of control of the U.S. over strategic resources and the potential geopolitical leverage China possesses; 'dominance' signifies also the lack as national security is threatened by illiberal Chinese practices on the global market. Thirdly, 'dependence' signifies absence of substantial solutions to regulate and restart domestic production of REEs; it evokes the imminent dangers of American primacy falling into the hands of the constitutive outside which requires *geoeconomic* strategies to counter them. Another important aspect to be examined is the connections of this antagonism to geopolitical narratives. Throughout the analysis of the US discourse there will be constant mentioning of these signifiers which invoke the hegemonic discourse and subsequently the *geopolitical identity* of the US.

2.6 Choice of sources

Can E. Mutlu and Mark B. Salter provided new insights to discursive studies of IR by outlining methodological proceedings that is required in locating repetitive acts of articulating particular identities and relational difference. This is useful as discursive evidences are what researchers look for in tracing the 'origins' by investigating textual variants utilised in formation of subjugated knowledge. Thus, selections of source texts are to be meticulous in order to arrive at particular conclusions.

"Discourse analysis takes textual, visual, or other semiotic data as its primary data...personal correspondence, publications, newsletters, newspapers, magazines, memos, transcripts, policy documents, visual symbols, still and moving images, and PowerPoint presentations are valid sources for discursive approaches." (Salter & Mutlu, 2012, p. 115)

Critical geopolitics by Ó Tuathail is the paramount piece that employs DA (discourse analysis) in its study of the geopolitical representations by core countries as imperial appetites. His use of DA did not specify methodological proceedings once the theoretical foundations was set, but in general, the ways in which Foucaudian genealogy operated in context of analysing governmentality in writing global space is the best way to describe the methodology used by Ó Tuathail. This is exemplified in his genealogical study in analysing the entirety of the geography discipline. Furthermore, the choices of data for textual analysis correspond to previous studies in the poststructuralist agenda that drew influences also from Edward Said's proceedings. Ó Tuathail's critique on different levels of geopolitical traditions required the gathering of discursive evidences that supported his analysis of how such *geo* forms of power are exercised by imperial states in relations with "places to be tamed" in the form of foreign policies. Aside from representations in writing spaces of danger, he includes also how academics and intellectuals exercised power - in formal geopolitics – by spatialisation practices that are influential in reinforcing policymaking decisions as they were the "wise men". Furthermore, in his analysis of the American vertigo demonstrated the powers of media in driving competing discourses that were equally powerful in creation of geographical imaginaries that envisions territorial and non-territorial boundaries and moral cartographies. Campbell's study of the reconstruction of the American identity through practice of foreign policy provided a study of discursive economies in structural forms that includes all the domains mentioned by Ó Tuathail (practical, formal and popular) through selections of policy documents – examples include constructing the Cold War narrative in the American perspective with the Long Telegram and Mr X article as representations of the USSR, and other textual forms highly influential and cited repeatedly.

Thus, following the customary practices that Campbell and Ó Tuathail employed in analysing their respective research agendas is perhaps the most relevant to the topic, otherwise mixing other potential research strategies could cause confusion and extend the debate to an unintelligible length. James Paul Gee outlined in his seminal book *Introduction to Discourse Analysis: Theory and Method* (2005) that discourse analysis utilises small pieces of data from a large corpus for sociological inquiry. Picking the relevant specific dialogues is crucial for researcher to further their arguments, whether it being primary or secondary sources. The subject of inquiry or selection of data should be within the context of the topic but at the same time does not have to be coherent to the hypotheses itself, because in case of deviation there could be further analysis as in why such 'unexpected' results came about. To divert from a state-centric approach to discursive studies requires the inclusion of other sources such as academic research papers as well as media sources. As demonstrated in Ó Tuathail's analysis of the media discourse on the geopolitical production of Bosnia, it is necessary to emphasize the influential formation of contemporary fears and insecurities to produce realities through sensational presentations through tabloid geopolitics (Debrix, 2007).

Because the sovereign voice of the West still holds true despite the departure from a state-centric approach in examining particular geopolitical identities. In this particular case, it will later be demonstrated how both Western media and academic work hand-in-hand to construct the narrative influencing the attitudes and actions of governments as reflected in the official reports. The gatherings of these discursive evidences help to legitimise the research program and provide a more nuanced understanding of the dynamics of geopolitical identities.

The analysis will begin with a survey of pre-2010 publications and the commentary they provide on the REEs industry. The United States Geological Survey serves as a good starting

point because of its focus on the industry in a technical standpoint and the record keeper of this particular industry since the 1990s; and it noted the rising Chinese market shares throughout the 1990s up to 2005. As media act as the ideological reinforcement of the core-periphery relationship and signifying repetitions of geopolitical identities, a selection of articles that are influential in driving the public discourse and contents that provide insights to the signifiers will be examined. Articles from various outlets and authors are analysed due to their influence grounded on repetitive citations and *sensational* factors; it will be discussed later how these became repetitive acts of productions of spaces and cartographies of dangers in connections to resource conflicts and economic nationalism, all of which are antagonistic to the neoliberal understanding of history but important in reinforcing geopolitical identities of the US. Finally, reports and hearings from Congressional level and Federal level are included as they reflect the partial acceptance of these articulatory practices.

2.7 Timeframe

It is customary for scholars who are engaging in discursive studies of international politics to set a specific case and a defined timeline in which the research programme is based on. Ó Tuathail's examination of the U.S. representation of the Bosnian War in 1992 to 1995 provided an example of the production of a geopolitical stage and codes in a specific timeframe. The consequence of which is a succinct explanation of how spatialisation occurred that had influences from the geopolitical culture of the construction of threats to American national security, how these threats are mapped, and how this practice of mapping structure strategic thinking. (Dalby, 2008, p. 418) David Campbell's deconstruction of the reproduction of the American identity based on the Derrida dichotomy is constitutive of an argument that is reapplied into multiple timeframes because the discourse is argued to be constantly reproduced.

This is utilised to explain socio-political phenomena in different eras beginning with the Puritan communities of the Thirteen Colonies, racial segregation and the main argument of how security is constantly rewritten during the Cold War period. The focus of a specific period, albeit a four decade span, should be taken as an example. Given the limited space of the thesis, it would be wise to follow Ó Tuathail's method of choosing a short time period that would be appropriate to further the original hypothesis. As stated in the previous sub-section, the pre-fishing trawler incident and the subsequent embargo will be considered in how geopolitical codes are enforced in Asia responding to China's rise influenced by other factors and the unobserved criticality of concern over the REEs dependency that the U.S. succumbed to. The incident on 7th September 2010 itself will not be discussed in detail. Rather, the focus will be on the discursive construction prior to the incident and how the alleged embargo is articulated in line with the previous embedded signifiers of monopoly that are found as residues of the Cold-War ideological contestation between capitalism and communism. Between the incident and up until 2015 there will be gathering of important sources that help perpetuate this constructed narrative through policy documents. The examination of how the articulation of the 'other' as a continuum of the hegemonic discourse follows in the post-incident narrative. The announcement of the ruling by the WTO in favour of the complainants in late-2014 are then taken as 'victories' by the Western countries over China and their achievement of international justice. Further elaboration will be made of how this victory had been capitalised by the Western discourse over which the constructed identity of 'mysticism' and 'counter-modern' forces that China brings in connection to historical grievances against the 'rational', 'legalistic' and 'civilised' West. Various other sources will be examined throughout this two year period that are deemed as important based on the criteria mentioned earlier with data gathering in exploring how China is portrayed as the

'bully' and loser in this fight. Additionally, other sources will be taken into consideration for analysis. For example, following Ó Tuathail's theorisation of critical geopolitics of examining also the role of the media that is instrumental in the repetitive acts of reproducing the geographical space of Asia and the American identity through reportage will be helpful in the research. Justification for this is that by addressing the issue by limiting to governmental sources is not sufficient as it merely acknowledges the holistic makeup of the discourse. Martin Müller contends that in order to keep in line with the poststructuralist research programme that is found in critical geopolitics, there needs to be a de-centring of the acting individual, the autonomy of the subject, and instead, place emphasis on the structural nature of the discourse. (Müller M. , 2008, p. 327) Placing the US governmental actions as subjects is insufficient in examining the production of discourse as other 'structural' forces help produce this image of China being a monopoly and the US dependency on REE. The media thus serves as another building block to the *structural characteristics* based on previous rhetoric on China being a revisionist state.

Other helpful examples that apply discourse theory include Nicola Nymalm's article (2013) arguing the failure of the Liberal theory of history (LTH) that was once thought of as the answer to turning China into a state that is friendly to the West. Her analysis limited to a specific timespan between 2005 and 2007 when the currency manipulation issue surfaced and passed a rite of passage of being inaugurated into the realm of Sino-US relationship. Nymalm declared the success of achieving a research programme that brought identity into focus in the same manner as Campbell did and how a small part of the discourse from the US Congress can magnify the creation of a wider discourse that could be misleading and thus unproductive in attempts to mediate the relationship between the two countries. The examination of carefully selected sources should unravel the geopolitical encoding within the discourse of the case of REEs and

reveal the U.S.'s constructed self-victimhood being at the mercy of China's aggressive monopoly of resources that threatens modern conditions. The result should also help argue any issues as 'minor' as this in comparison to immediate animosities in Sino-US relations fuels further animosities; more problematic are contentious affairs that include currency manipulation, cyber warfare, trade disputes, human rights and Taiwan. Issues like the REEs case could prove the geopolitical culture that Dalby and other critical geopolitics scholars who contend their existence that have achieved the status as 'ahistorical truth'.

2.8 Other research practices

Alternative ideas to this research agenda would come in multiple forms. To abandon discursive studies of this case would be to pursue mainstream IR research programmes that are realigning back to the positivism camp, thus, refocusing and supporting the geopolitical imaginaries of the Western states and the US geopolitical traditions. The reason for such assertive claims is the commitment of this research programme to subvert the existing knowledge/power nexus that is structurally static in influencing policymakers and public opinion that is fuelling further geopolitical animosities. The realist logic would be applied in explaining the rationale for labelling China as a monopoly and thus in urge of securitising all things necessary in this zero-sum game. Thus, justifying both sides' aggressive responses to each other and inter-locking each other in a fight to the bitter end.

However, in retaining the poststructuralist agenda and the Foucauldian programme there can be an approach which can satisfy the scientific realm. Critical discourse analysis (CDA) mentioned earlier offers a more meticulous programme that can ascend to the scientism that is acceptable. Empiricism and quantitative methods are utilised in a systematic programme as seen in works by theorists such as Gee pursuing this field of research. Examples include studying the

linguistic construct of a text, the rhetoric as well as the content that is narrowed down to the most basic foundational construct of a discourse to explain socio-political phenomenon. The research aims are similar as they seek to use such meticulous methods for subverting the knowledge/power nexus that standardised the epistemological being of objects and ascription of meaning to the subject in this relationship of signification. The reason for possibilities in employing CDA in the topic of this choice is the rigour and quantifiable methodologies that it advocates. Although it would be acceptable in the scientific realm to utilise empiricism in rhetoric studies but the details of which in examining the frequency or linguistic construction of a discourse would be too time consuming. Moreover, if Gee's programme of raising 26 questions separately within a set micro data corpus and the seven building tasks of reality are utilised, the problem of time would persist. Studying one speech or text in order to fulfil the totality of the questions would constraint the resourceful discursive strategies found in the discourse. Thus, since there is a time flow of investigating the articulation of the system of equivalence there should be careful selection of data in order for a succinct analysis.

2.9 Limitations and self-criticisms

DA provides a powerful theoretical and analytical toolkit in examining the social of different realms. Nonetheless, it has its pitfalls too especially with cases that deal with political analyses and international politics. In light of the powerful critique propagated by a new distinctive branch of geopolitics necessitate constant critical reflections in the post-structuralist spirit. Proposals by Phil Kelly over a critical insight of this new branch of post-structuralism provide the basis of this self-critique.

Levels of analysis

Different perspectives in analytical framework of critical geopolitics are identified to be more 'fluid' (Kelly, 2006, p. 8) than in traditional international relations theories wherein scales are clearly defined and the focus on a specific actor or level is obvious. In the classical sense it pursues a state-centric approach in the analysis of policies and decision-makers, whereas critical focus on transcending scales that reveals different modes of representations that ascribe geographical knowledge utilised in politics. The approaches that classists advocate are arguably clearer and succinct in presenting such 'facts'. This is because of their meticulous basis in theory building and testing. On the other hand, it may seem that there is a blur in levels of narratives found in critical geopolitics. For example, terms such as geopolitical *traditions*, geopolitical *cultures*, and geopolitical *imagination* all carry similar meaning but are often conceptually unaddressed for clarifications. Although Ó Tuathail laid out the above terms with different definitions to clearly define functions of these terms into scales it would seem to be confusing for the general reader. For research purposes it is useful to determine the scales presented, as the macro level of geopolitical *imagination* links to John Agnew's critique on geoeconomics and modernity in general. (Mamadouh & Dijkink, 2006, p. 355) The meso level of state-centric approach of geopolitical *cultures* and *traditions* explores power positions in international politics and visions of hegemonic devices in viewing world politics applied with ideological embeddedness in geopolitical reasoning as most famously demonstrated in Mackinder's dictum.

During the course of this research, it was rather difficult to fathom the general rules and regulations as stipulated by different customary approaches found in critical analysis of classical geopolitical reasoning. Nonetheless, attempts to synthesize an appropriate study without adhering strictly towards a particular formulaic thinking arguably help to attribute to the fluidity

of a critical approach. By using the overarching term of geopolitical *identity* postulated by Muller in conjunction with Campbell's analysis of the 'self' and 'other' arguably helps to produce an analysis that crosses 'scales'.

Object of analysis

One powerful critique from Kelly's article shows a 'lack' found in choices of analysis. The premise begins with the fact that most critical studies on classicist geopolitics Ó Tuathail (1996) on U.S. and British 'imperial writings of space', John Agnew (2004) on 'US hegemony', Simon Dalby (2008) on 'American imperial culture' and Dodds (2015) on popular geopolitics and the 'War on Terror' account for the overarching theme found in critical geopolitics' objectives.

"Is it fair and accurate to describe the capture of classical geopolitics within an assumed hegemony, when the new version of geopolitics has itself been captured by radicals who themselves emit an ideology and may be as impure as the hegemons they seek to defeat?" (Kelly, 2006, p. 49)

Deconstructive efforts to subvert existing power relations between core and periphery in effect purports another relation and implants yet another ideology to which the hegemonic struggles of discourse is occurring between the classist and critical approaches. Furthermore, another question could be raised in terms of the consolidated research program offered by critical geopolitics. That is to ask whether it is time to move on, and rather than exclusively pitting against western discourses, can't smaller states be examined too in bringing about a more nuanced study which potentially contributes more to the existing literatures so that this particular discipline could be revitalised and more enriching to general readers? From this perspective, it

would be emancipatory and insightful if one is to introduce these approaches to study international politics as well as political geography in general. Nonetheless, journals such as *Antipode* offer exactly this approach in examining geopolitics in the critical manner.

Discursive evidences: Problems of representation

One striking problem identified by Ó Tuathail was the analysis of discursive evidences found in post-structuralist thinking. This was mentioned in his review of Campbell's *Writing Security* (1998). Ó Tuathail problematised the superficiality of representational discursive evidences and their 'criteria' over which identity was produced and reproduced. The argument rests on the basis that it is rather difficult to determine to what extent a particular piece of discursive evidence is representational to the overarching discourse. In the case of this research project, it would be easy to question to what extent the selected sources help to perpetuate the Cold-War mentality and the geopolitical identity of the U.S. How would it be for one to justify that this identity rebuild or reshape is evident in demonstrating the fact that the publications attribute to the geopolitical imaginaries of the US as bastions of modernity and freedom as its telos of history? One can problematize the validity of a particular piece of text such as an article to be influential in driving a particular discourse, and moreover, it can be asked how powerful particular discursive evidence is. This problem arises from the fact that as states are decentred from the analysis, it would mean the increased difficulties in pinpointing the manifest representation of facts over others as post-structuralism rejects objectivity. The decentring of state from the analytical framework presents ambiguity due to vastness in prospective discursive evidences without strict organisation or coherence.

Furthermore, Ó Tuathail criticised the narrative's absence of deliberate and conscious manipulation of identities by certain social actors to advocate their own perceived ends. (Ó

Tuathail, 1996, p. 651) The significance of group interests for exploitation of a narrative for political goals should also be highlighted which would help sources selection and interpretation of particular discursive practice. In the case of Campbell, economic gains by 'identifying Japanese threat' to American primacy as Samuel Huntington (1993) did highlights the rationale behind the attempts to reinvigorate the economy as the automobile industry was in decline at the time due to 'unforeseeable' consequences of free trade as it neglects externalities. Special interests from such lobbyist could exert influence on Congress to drive the narrative of labelling a 'threat' which would be compelling for certain legislations that would reverse the trade policies enacted by the US in the first place.

In the case of this research, an examination behind the rationale of mining companies backed by members of Congress to re-establish domestic production of REEs could be included. However, it would also render the thesis too lengthy and deviate from the original objectives of the analysis. As for the problematic of the de-centred approach on discursive economies in a dominant, if not hegemonic narrative, the linkage between ideology, fundamental values and identity towards geopolitical imaginaries and cultures as they are all supportive of each other through articulatory processes are arguably strong and coherent. Thus, such linkages help to establish the groundwork for the analysis in the next chapter.

3. Literature Review

This chapter devotes in examining the different critiques on classical geopolitics through the lens of critical geopolitics. As the methodological chapter outlined the role of critical geopolitics and discourse analysis essential in exposing the way geopolitical scripts are constructed, there needs to be further examples of how these two serve as the fundamental basis of the current research topic. First, there will be an extension of critical geopolitics in providing a liberating perspective on international politics and its critique of conventional geopolitical thinking. This is achieved with reviewing the way in which Ó Tuathail criticises the re-writing of global political space through the reproduction of the American geopolitical identity in the immediate years following the end of the Cold War. Following this is a survey of different categories of *geo* thinking that demonstrates the biased nature of how political spaces are written both metaphorically and physically; by doing so, it aims to call for reflection of these conservative *geo* thinking such as geoeconomics, economic nationalism; resource conflict and resource nationalism as they are demonstrators of the unrelenting efforts by classical geopolitics to script international politics in a sovereign voice.

3.1 U.S. Post-Cold War geopolitical identity

The geopolitical identity of the US as self-proclaimed victors of the Cold War struggle ushered a new era fraught with ever more dangers other than communism. It attests something of an existentialist crisis or how Ó Tuathail would describe it as being 'victory crises' as the main antagonist, the USSR, was dissolved. 'After the Cold War, strategic geography of proximity and distance in U.S. geopolitical thinking has become diffuse and uncertain.' (Ó Tuathail, 1996, p. 190) The new period is characterised by undecidability, irresolvable, 'floating indetermination' in conditions of our existence and the established ways of representing them (Campbell, 1998). It

attempted to reshape the imagination of danger, and specifically the terrains whence threats originate, as well as the related discussions of appropriate security responses. (Dalby, 2008, p. 414) The temporal fixation of 'end of history' gave further legitimacy of inevitable spread of neoliberalism and democracy as a result of globalisation as well as the unipolar order of the 1990s. This was exemplified with the Gulf War, a redefinition of the American geopolitical identity as the supreme actor in international affairs. Speaking in almost a sovereign voice, such reimaginings are aided by the academia and popular media. Neo-conservatives such as Samuel Huntington are exemplary to the efforts made to arrest the floating indetermination of the 21st century by mapping civilisations in future conflicts.

However, this was also the specific point of history wherein the geopolitical signifiers have struggled as demonstrated through conflicts such as Bosnia. Ó Tuathail's critical reading of geopolitics (1996) is applied in the study of the Bosnia conflict in 1992 of U.S. discourse, and demonstrated the struggles of two discourses which also prove the theory of Laclau and Mouffe of impossibility of closure. "Bosnia" in contemporary political discourse, [represented] a competing paradigmatic signs of post-Cold War world disorder, [a] place of ethnic fragmentation, bloody territorial war, refugees'. The "holocaust" debate on the one hand was based on the macro-narrative structure of this post-Cold War responsibility of the West to prevent conflict and spread democracies as a new found mission in humanitarianism which attributed to many other globalised issues of the same era. Thus, rewriting geospatial units and global spaces of dangers and risks became constitute to the identity building tasks of the American national 'exceptionalism' and its fundamental values. It represented also opportunities for the West to secure for itself its positive ideal as 'moral agents' and rescuer of humanity. These calculated production of geopolitical spectacles through televisualisation and spectacularisation of conflict

saturated in media reinforced this urgency of intervention in the sanguine political attitude of legitimising Western imposition of justified order and the detachment from 'mechanised killing'. (p. 191)

However, on the other hand, the "quagmire" debate was equally strong at the time. The mainstream media disrupted and challenged the 'Western geopolitical script' through its coverage of the conflict. (Ó Tuathail, 2004, p. 81) It grappled the structural narrative of the Bosnia as 'unsolvable' with the uses of signifiers that depicted the conflict with readings of 'thousand year blood feuds' and 'innately conflictual between religious and ethnic groups' which made policymakers wary of the nature of which how the West should handle the issue. For the U.S. it was especially sensitive due to the past experiences of Vietnam. These signifiers attempted to distant wars in Bosnia and Croatia from the West's self-image of modernity and enlightenment. This evokes spaces of modern, rational civilisation *vis-à-vis* the traditional primitivism of 'blood-feud' and conflictual cultures of the Balkans harking back to the origins of the First World War. Nonetheless, the two 'scripts' geo-politically produce 'Bosnia' as a geo-political imagination comprising both imaginary and symbolic writing of this geomorphic unit. It is neither one dimensional in the dialectic sense of ideologically incompatible with the U.S. geopolitical imaginary as the 'Other' of communism or authoritarianism, but rather a place of 'in-between' (Ó Tuathail, 1999, p. 195) which conjures strategic, political and moral dilemma for members of the U.S. foreign policy establishment. The antagonisms, in the conflictual narratives derive from the political apparatus in Laclau and Mouffe's discourse theory, are represented here in the two competing geopolitical scripts. This struggle demonstrate the paradoxical humanitarian vision of ethic responsibility within an assertive social distancing. (Ó Tuathail, 1999, p. 222)

Since the beginning of the 21st century, the attempts to reterritorialize and reframe the world within Western categories and conceptions have been continuous despite the experiences of the vertigo in Bosnia. The way in which the cost-benefit analysis on the one hand acting moral agents and on the other hand potential risks are played out by the West in series of addressing global issues is in need of analysis. This is aided by the repositioning of order by using fragments of the beliefs, customs, practices and narratives of old splintered world order. 'New threats' necessitates the reorientations of world in face of dangers that challenge the long-standing and well-established modes of interpretation associated with the Cold-War (Campbell, 1998). It would be fair to contend that the geopolitical identity of the U.S. sustained itself in the course of the 'holocaust' narrative as the dominant, if not hegemonic, geopolitical discourse of the succeeding years. Although this may be too much of a generalised argument to make, it nonetheless is under constant bombardment of the 'quagmire' counter-discourse found in the Bosnian saga. Throughout the decade, the U.S. geopolitical discourse was shrouded with paradoxical visions in struggle for a hegemonic voice. Images of fallen American soldiers paraded through the streets of Mogadishu presented a challenge to the humanitarian mission statements of neo-interventionism. Experiences of vertigo and creation of new visions in perpetuating the culture of Cold War is characterised by the 'risk society' or new cultures of 'national security' generated by the sense of endangerment by deterritorialising world-order where dangers are not obvious or manifest or even 'known'. (Ó Tuathail, 1999, p. 231) This is crystallised in the constant rescripting of global spaces of danger to be incorporated into questions of 'national security'. Shifting attitudes of policymakers in the Post-911 order arguably demonstrated the best case in this attempt to reimagine this new danger. The entirety of the War on Terror serves as an example to break free from the straitjackets of uncertainty of this risk

society. Conflicts are represented with clear moral cartographies as exemplified in the “Holocaust” discourse and the dichotomous interplay once again achieved by this hegemony. The invasions of Iraq and Afghanistan under the Bush doctrines of preventive wars, strategies of regime changes and neo-interventionism rendering military coercion back on the agenda as imperial appetites. (Dalby, 2008, p. 424)

3.2 Salvaging primacy: paradoxes of geoeconomics and economic nationalism

The discourses found in US geopolitical thinking can arguably be labelled as paradoxical and shrouded with contradictions. The interplay of two argumentative lines found in the discourses of the American telos of history, geoeconomics and economic nationalism in the post-Cold War period demonstrate as attempts to reimagine new ‘threats’.

Aside from the geopolitical identity reshape was the emerging discourse of geoeconomics. There are two definitions of this term and both are synonymous. Both imply projection of power and are state-centric in the same understanding as the realist paradigm found in international relations theory, but under the banner of economic policies. One definition is given as: (1) the geopolitical consequences of economic phenomenon, or, as the economic consequences of geopolitical trends and national power. (Baru, 2012) However, most would subscribe to the original author who termed this new mode of power competition between states. Edward Luttwak’s definition is as follows: the logic of interstate conflict is vectored through the ‘grammar of commerce’. (Ó Tuathail, 1996, p. 231) These involve series of intentional practices either deployed by ‘the state’ or through ‘the state’ by national ‘economic elites’ in order to win access to new markets, bloc access to domestic markets, create basis for economic expansion through state-led investment, training and regulatory change, or even through espionage

involving industrial and technological secrets. (Sparke, 1998, p. 66; Moisiu & Paasi, 2013, p. 268)

Although there is an existing debate over the applications and conceptualisation of geoeconomics but this is not to delve into the depths of the debate but to introduce it in the way Ó Tuathail did in his survey of geoeconomics as another orthodox geopolitics phenomenon. Or as he identified it to be yet another re-articulation of Western primacy in international politics as Luttwak's work devoted into the imminent threats of both Japan and reunified Germany in the late-1980s. This was heavily criticised by Ó Tuathail over which the neo-conservative camps of the academic establishment of the same era had feared the loss of primacy for the West as the Cold War drew to a close at the same time. The dichotomous or clearly demarcated lines of engagement between the U.S. and potential foes had been blurred at the time. These culminate to geopolitical discourses of which are responses to 'globalisation' (Sparke, 1998, p. 66). But because of its perceived relative decline as many saw especially on the economic 'frontier', it came to no surprise as economics became strategically important harking back to the 'mercantilist' or protectionist economic policies of the 18th and 19th century.

"[T]he authority of state bureaucrats can be asserted anew, not in the names of strategy and security this time, but rather to protect "vital economic interests" by geo-economic defenses, geo-economic offensives, geo-economic diplomacy, and geo-economic intelligence" (Luttwak E. N., 1993)

The realist paradigm inaugurated into the economic realm is shared by other conservative scholars too. Samuel Huntington (1993) posits the void of a common enemy, the Soviet Union, would allow innate conflicting interests especially economic ones resurface between friendly

countries. For him, competition for primacy is a natural phenomenon among individuals and countries.

'Economic power will be increasingly important in determining the primacy or subordination of states.' (p. 72)

In his article championing necessities for sustaining American primacy, Huntington identifies several components in the Japanese challenge to American economic power as (1) producer dominance; (2) industry targeting; (3) market shares; (4) import restrictions; (5) sustained surplus. Based on these are the essentialisation of Japanese economic strategy to outpace the American one in an 'unfair competition', thus, unleashing a cold war between the two sides. This can be applied into the same reading of discursive construction of Japan as the 'Other' with "unfairness" as a signifier. In addition, Huntington also speaks convictional of the Japanese strategy as economic warfare. Such racist undertones are reinforced with repercussions on the U.S. national security undermined by Japanese innovations in development of military technologies. The same "dependency" was to be found here over small components even with an official ally, something unfathomable because of the same dependence Japan has with the U.S. over defensive purposes and the common enemies they share in East Asia, namely North Korea and China. Strange as it may seem but other accounts that share the same sceptical views of the Japanese government by members of US congress were evident as seen in the 'FSX' debate (Ó Tuathail, 1992).

The causal linkages of geo-economics 'warfare' to national insecurity provide alarmist prospects to the 'grapple' of American industries by Japanese firms. The vulnerability is highlighted by the fact that U.S. import of products and goods are at the mercy of Japanese

'threats' of restricted outflows such as the financial market. *'Tokyo can strangle the American economy by cutting off investments or purchases of Treasury bonds.'* (Huntington, 1993, p. 79) Furthermore, Huntington identified encroachment by Japanese firms in American lobbies. This 'infiltration' into the decision-making process of the US legislative and executive branches provides somewhat cautionary notes of this unregulated US political system of allowing lobbyists to exert influence over policies that could run counter to fundamental American interests. The extent to which Japan had penetrated into the American system was alarming to conservatives like Huntington and that the full-scale geoeconomic warfare had been waging at all fronts. Solutions include recognition of the economic power maximisation strategy pursued by Japan and taking measures to restore American primacy *vis-à-vis* Japan in the forthcoming future.

Economic nationalism is often portrayed as manifestations of an irrational backlash to the forces of global economic change and an anachronistic economic doctrine in the age of globalisation. (Pickel, 2003, p. 105) Thus, it is simply categorised as the direct opposite to economic liberalism, the dichotic 'Other'. It is closely associated with economic protectionism and autarky, and encompassing the entire governmental attitude towards preserving and maintaining the economic sovereignty of a country with such policies. Pickel (2003) argues that "the economic dimensions of specific nationalisms make sense only in the context of a particular national discourse, rather than in the context of general debates on economic theory and policy." (p. 106)

Critics of this simple dichotic categorisation as the arch-enemy of liberalism contends against the narrowness found in this definition because of the neglect of the essential 'national' character of the national economy or the diversity of conditions for particular economies. Thus, it

is the problematisation of the concept 'economic nationalism' that calls for a rework on the theoretical concept's requisite to the historical, political, cultural formations and social 'embeddedness' of the economy. Pickel's survey (2003) of this narrow definition picks out how neo-liberal political discourse constructed this notion of the 'other' utilised in contemporary ideological and political debates of which the media played a distinctively driving role in articulating this as ahistorical and grounded knowledge. Furthermore, Pickel deconstructed how this concept became a contingency in the meta-discourse of the 'End of history' argument and the victory of neoliberalism in general to reveal its purpose and how it is instrumentalised by political interests of the staunchly neoliberal economies. Signifiers such as 'autarky' and 'mercantilism' represents the lack here as what Simon Dalby reminds as the American telos of history of which all states that do not measure up to the American way of doing things such as neo-liberal economic politics and anti-statist are understood to be underdeveloped. (Dalby, 2008, p. 427)

3.3 Resource conflict and geopolitics

Conventional wisdom on resources pervades in most debates talk of its limits and scarcity. It is argued that resources are vital to human existence and that they have been fought over in past conflicts. Moreover, they are considered essential attributes to continuation of the modern conditions of which a majority of the world has got used to, and plans to sustain this are argued to be dependent on their availability in procurement. Oil and water are the two most crucial resources that dictate current living standards; steady prices and availability are constantly monitored and assessed as they are used in almost all aspects of human life. Manufacturing, agriculture, travelling and even high-tech products require these two crucial resources, but perhaps the most important attribute of water is its potability. Without which humans would not

survive. Other resources are considered vital too; they include food, metals, minerals and other energy sources. With growing numbers of industrialising countries as well as population growth as general trends, many question the prospects of ecological disasters derived from over-exploitations in meeting global demands. Core countries are especially concerned with these trends and have placed resource depletion as a high priority for policy-makers because of the role that resources play in their own economies and high-tech industries (in the case of industrial vitamins like REEs). Thus, mineral scarcity has been ranked among the most worrisome security issues. This has received plentiful attention in both the academia and political arenas. Many of these discussions and debates revolve around the emerging industrialising countries that also require stable supplies of minerals in developing their economies. China had been the subject of multitudes of research ranging from being a liability to global food security (Brown, 1995), rare earth elements (Hurst, 2010a), water (Chellaney, 2013), liability on the Mekong ecosystem (Osborne, 2009), carbon emission in absolute terms and deforestations. Furthermore, the perceptions of scarcity derived from a narrow view and understanding of resource supply and exploration have helped to inaugurate resources and minerals to the national security agenda.

The traditional argument over the theory of resource scarcity is based on this rationale. Growing economies such as China pose as threats because they are resource-hungry in keeping consistent growth and domestic demand. This is followed by a race for acquisitions in 'resource rich' countries in faraway distant regions, mostly periphery countries in Africa and Latin America of whom are being exploited by Chinese SOEs buying up all their reserves. Because of the constant increases in demand given the population growth of developing countries, supplies are not able to meet demand which result in fiercer competitions between countries. This is

further exacerbated by perceived fear of supply risks and disruption which help fuel 'conflict' or give rise to strategic plans by countries to outpace each other.

However, this is a misnomer so explains by Qasem (2010). The above argument of resource scarcity is subscribed to an intuitive framework of thinking, a rather *realist* conception of which it follows into what is called the *static scarcity paradigm*. It conceptualises resources with a fixed amount and that there is a finite amount of them depending on the rate and speed of extraction. Criticality in scarcity dawns upon us when known reserves and deposits are unable to meet demand which visualises a Neo-Malthusian scenario. Conflict over resources as an end-game of biblical proportions engulfs the planet. This paradigm is governed by a metric range that is an estimate remainder of a resource before depletion that is not in absolute terms. Moreover, the range is derived from an indeterminate rate regarding future consumption as well as uncertainty over remaining unexplored sources that are economically exploitable. (Tilton, 2003; Qasem, 2010) The acceptance of this paradigm is largely determined by not the physical depletion of the resource. But rather, it rests on the economic costs wherein the affordability of production does not meet stated demand. Solutions to scarcity in this understanding rest in recycling of resources, reduction of consumption and seeking for alternative sources or substitutes. It does not take into account of absolute quantity rested on the earth's surface when reserve data are shown.

The term resource wars was popularised in the 1980s as a geopolitical vision of future deterritorialised conflicts between states and non-state actors. Originally, it addressed the potential new threats posed by the USSR due to its conflict with the US over disputed 'peripheries' that possess fuels and minerals. The reimagined geographies of danger and distant

lands are emphasised in explaining future conflicts and threats revolving around the 'pursuit or possession of critical materials'. (Le Billon, 2012, p. 11)

Resource should be understood as material objects as well as social processes. They are constructed through systems of significations and securitised in conventional discursive practices that cultivate theories such as 'resource wars'. This static paradigmatic lens generates 'scarcity' in relations to its causal link to conflicts and violence, because 'scarcity' signifies the lack, the emptiness of systems of knowledge to control and exploit for its substance. Thus, it mobilises political actions by both state and non-state actors to procurement as resource convey senses of empowerment and opportunity but also dependence and vulnerability. (Le Billon, 2012, p. 9)

The objective of utilising all possible means to gain access to the fullness of benefits offered by resources characterises the extent to which conflict could be fostered through simple place-based struggle. Conditions of scarcity are generated through the context of resource abundance due to the higher population and densities which results in territorialisation.

Geomorphic state entities in the modern age necessitate strategies to control manpower and commerce to sustain its economic development and military prowess. (Kennedy, 1987) The access for resources motivates competition for control which leads to conflict. As such, struggle over resources requires control over territories which attributed to Western colonialism beginning with the mercantilist age of the 15th century. The significance of resources became paramount to power competition between industrialising powers in the 19th century and continued throughout the 20th century. Thus, geopolitics was often informed by resource control as they were national interests to a state's war machine. Oil was inaugurated into the 'high politics' of the imperial powers in the aftermath of the First World War. Ludwell Denny's *We fight for Oil* (1928) epitomises the classical geopolitical thinking in relations to resource conflict

as competition within the Anglo-American alliance was prelude to future war. The book arguably embodied geoeconomics and resource competition in the language of Mackinder. This was achieved with the quote of a French industrialist who foresaw prospects of a conflict between Great Powers in a memorandum.

“He who controls the oil will own the world, for he will rule the sea by means of the heavy oils, the air by means of the ultra refined oils, and the land by means of petrol and the illuminating oils. And in addition to these he will rule his fellow men in an economic sense, by reason of the fantastic wealth he will derive from oil – the wonderful substance which is more sought after and more precious today than gold itself.” (Ludwell, 1928, p. 16)

The scramble for Africa in the colonial era helped drive the developing economies of the Western imperial powers, the Great game between Britain and Russia over Central Asia for securing supply chains in the Indian Ocean. Further examples include redrawing maps in the Middle East secured supplies for oil companies which were in competition between Britain and Germany during World War I; Nazi Germany's failed attempt to control the Caucasus, the industrial regions of the former USSR and bastion for the Soviet war machine during World War II.

Robert Kaplan's influential article *The Coming Anarchy* (1994) epitomises the foreboding outlook shared by neo-conservatives such as Huntington and Luttwak. Representations of West Africa as the future source of conflict due to prevalence of crime, resource scarcity, overpopulation, uncontrollable diseases and reprise of pre-modern religious and cultural practices are deemed to be a real 'strategic dangers'. Aside from Orientalist overtones, Kaplan emphasized the need of understanding the future of humanity depends on management of

problematic issues and the 'environment' represents the most alarming security threat of the 21st century.

"Though optimists have hopes for new resource technologies and free-market development in the global village, they fail to note that, as the National Academy of Sciences has pointed out, 95 percent of the population increase will be in the poorest regions of the world, where governments now--just look at Africa—show little ability to function, let alone to implement even marginal improvements." (Kaplan, 1994, p. 6)

In Kaplan's view, these daunting prospects of collapsing states derived from 'environmental scarcity' necessitate the inauguration of potential risks to the political debates of core countries. By transforming resources to the global environs endows the Western countries to securitise it in a biased way. The analogy of the End Man found in Fukuyama's thesis (1992) *vis-à-vis* the First man defined by Hobbes is a good example of such 'degrading' enterprise by a privileged Western academic and its imperialistic sight and cite appetite. This 'securitisation' process articulate interests of developed countries and at the same time neglecting the developmental needs of peripheral countries. Thus, accusations involving causal link of 'over-population' to 'morbid demand' characterise narratives essentialising developing countries such as China and India.

One startling example include the 'food crisis' generated by discursive construction of China's overpopulation, and articulating in ways that represented the Chinese population as avaricious and greedy. This was reflected by the book *"Who will feed China?"* by Lester Brown (1995) contributing to the culture of zero-sum competition in the realist paradigm projected through the 'Clash of civilisation' thesis proposed by Huntington. Thus, it is claimed that

classical geopolitical perspectives on 'resource wars' inform and reflect dominant geostrategic policies and worldviews in ways that geoeconomics and economic nationalism do – a resurgent of Cold War paradigm. Critical geopolitics helps to identify the representations of resource by locating the signifying practices that perpetuates dominant or hegemonic voices of danger.

The examination of how resources are understood and represented is crucial in arriving at nuanced understanding about their textuality as securitised substance. In the case of REEs it is no doubt that the 'rare' has signifying attributes which help drive the dominant narrative of 'scarcity' which is already understood as prospective to conflict. Further, the supply of the REEs to core countries has been reduced to geopolitical scripts articulated by oversimplification of power relations and representation of potential flashpoints. In connection to efforts of critical geopolitics, popular narratives that drive the dominant institutional settings of Western powers are important vehicles to inform the public consciousness. (Gong & Le Billon, 2014, p. 294) The power of sensationalising 'prospective' resource conflict clearly demarcates spaces of danger typified by Kaplan's exploits; and boundaries drawn that affect modern conditions are immense. Thus, at the same time it is silencing voices such as collective responsibility of a broader sense of humanity's increasing demand and consumption for cheap and small technologies. There is no room provided for deeper reflection of the textuality that gave rise to the 'resource conflict' or even 'environmental concerns'. If REEs are *sine qua non* for green technologies serving the betterment of mankind then why should they be securitised in the sense that it serves 'national security' because of their defence applications?

In retrospect, the increasing calls for curbs in carbon emission with renewed efforts by the international community seem to be undermined by retrocessions or reversion to 'national interests' informed by the realist paradigm. The fact that China's efforts to lowering its carbon

footprint by investing in green technologies, using REEs, are called into question by the West and especially the US because of 'protectionism' and 'resource nationalism' that is perceived to be against the neoliberal ideology framed under the banner of WTO stipulations. Added to this heinous concoction is the essence of 'securitisation', the implications on the US military-industrial complex. The proceeding chapter begins the discursive analysis of how this REEs 'threat' from China was constructed and articulated in ways that serves as one of the many examples demonstrated above in perpetuation of a particular geopolitical culture and tradition endowed for the West and especially the US.

4. Discourse Analysis of Chinese monopoly

This chapter devotes in the utilisation of the analytical techniques synthesized in the methodological chapter. The objectives as laid out is to identify the *geopolitical signifiers* that attempt to reproduce the multifaceted identities of the U.S. *vis-à-vis* the People's Republic of China regarding the issue of the rare earths industry. It will be conducted in the years between 2000 and 2015; and throughout the analysis, the way in which the hegemony is articulated and consolidated will be identified also.

4.1 Growing Dependency

China's share in the REEs industry grew at a staggering rate throughout the 1990s. Annual reports on the rare earth industry published by the USGS cite the increasing growth in worldwide demand throughout the decade amid the technological revolution. By the turn of the millennia, REEs mining and production was already an industry gaining attention due to a number of factors. Prices seemed to be lowering due to outsourcing of downstream productions to China; and the acquisitions by state-owned enterprises (SOEs) from increases in domestic demands. The report to USGS in 2004 served as another fresh reminder of this industry as it had done so annually before. However, unlike previous reports, the 2004 reports primarily focused on the applications in military hardware. This was unprecedented because on the other hand previous reports had been based around commercial applications such as fluid-cracking catalysts. (Hedrick J. , 2001) Beijing then began imposing export quotas because it realised the unsustainability of maintaining such large and unregulated mining operations in the private sector, many of which were illegal. James Hedrick (author of the annual reports) identified productions primarily derived from China and none were mined in the US at Mountain Pass, CA.

For example, Yttrium (one element for defence applications), were all sourced from China and this is established later in post-2010 trawler incident reports on REEs that it is the most crucial element. The low production costs of Chinese plants resulted in the closure of other companies, and this effectively acknowledges the increasing market power of Chinese sources (but whether it is state directed or not is absent).

“Rare-earth producers worldwide are expected to continue to struggle in competition with China’s lower wages, inexpensive utilities, and fewer environmental and permitting requirements. China is expected to remain the world’s principal rare earth supplier.” (Hedrick J. , 2000)

Nonetheless, it is imperative to bear in mind that previous annual reports confirmed that world reserves are sufficient to meet forecast world demand well into the 21st century. Additionally, it is noteworthy that being a principal supplier does not have the same connotations as the empty signifiers that are labelled later such as ‘dominance’ or ‘monopoly’. How these signifiers were articulated in the way in which it had become politicised and causally linked to resource nationalism and geopolitics of resources will be discussed below as the discourse is driven continuously. The point of which the articulation occurred with signifying practices will be analysed in the later selected publications.

Throughout the report (2004), Hedrick cites also repeatedly the increasingly competitive nature of the industry in spite of a diverse group of suppliers, but it was obvious that China would remain a principal supplier. Both of these facts were repeated annually between 1994 and 2004. The linkage to defence application was limited but not neglected or over-emphasised because usage in the energy sector as well as green technologies have gained traction

concurrently due to concerns over political ecology and climate change. Nonetheless, China, by 2004, gained the status as the 'principal' supplier of REEs with 78.9% of US imports and for individual elements. (see figure 6)

The first published documents on diversity of REEs and their applications for defence purposes appeared in the same year and the criticality to American national security was emphasized (Hedrick J. , 2004). It also cites for the first time the fact of China being a 'dominant' world producer. Nonetheless, it remains effectively a technical paper over which the applications of individual elements, compounds and oxides were listed out in a methodical way that service researchers. These reports from USGS arguably received undue attentions over the blatant link of REEs to defence industries. The problem still remains unanswered on the 'gap' between 2005 and 2009 of this period of silence given potentialities of supply risk REEs may pose. The question mark posed in the presentation (see figure 7) over whether the 21st century of REEs industry would be a Chinese era is telling sign of uncertainty and anxiety given the enormous growth in production trends in a short period of time.

4.2 Reawakening the world

By 2009, the media assumed the role of driving the discourse by taking precedence in the discursive construction and acted as reinforcement to the dominant narratives of issues concerning the imagery of China as an irresponsible player. The emergence of *signifiers* in the REEs industry had become a supplement to the overarching discourses prior to the fishing trawler incident in 2010. 'Monopoly' and 'dominance' are the key signifiers which represent the lack, the lack being absence of US government or Western control over the industry in case of supply chain disruption. Repetition and circulations of the 'shocking' aspects of Chinese market share found in the publications confirmed the role of the media as the ideological reinforcement

to the geopolitical narrative as even governmental reports on the issue have cited and sited attributing to China's monopoly. The REEs case was achieving its rightful position of the American teleology through the politicisation process. Aside from the media driven discourse, academic publications had started to participate in the articulation with the choices of the signifiers as titles and keywords. Formalising the narrative in IR debates has taken precedents in the fullest dichotic manner, thus, achieving a linear path of 'media sensation' to 'academic publications' and possibly to inform policy-making processes. Following this is the reflection of public as well as government apparatus to the issue addressing it as a 'national security' concern.

Articles from mainstream outlets were often cited even in governmental publications as a confirmation to the multifaceted and complex structure of this particular discourse model. Financial times, The New York Times and other outlets help institutionalise particular modes of representations through repeated reciprocal citations. Through studies of selected articles in 2009, the discursive production of China as a potential 'threat' derived from its REEs industry can reveal how geopolitical codes are embedded. One article from the Financial Times highlights the problems of acquisitions by Chinese companies of foreign-mines and a grandiose strategy of geoeconomics which claimed that China "caught the rest of the world sleeping".

"Since 2004, or even earlier, the Chinese government has treated rare earth resources as strategic. In order to protect the resources available to China, the government employs a three-pronged strategy; rare earth exports are restricted, imports encouraged, and outbound rare earth acquisitions actively encouraged." (Latimer, Kim, Tahara-Stubbs, & Wang, 2009)

This is arguably the new association found for the REEs industry to other industries China attempts to replicate and advance at the expense of foreign companies, an approach to the

geo-economic strategy identified by Luttwak and Huntington. It is similar to other claims of China being the 'best' at copying others and gaining market access and mastering 'capitalism' facilitated by the state-apparatus much better than the West because of state-directed finances and initiatives. *"The Chinese have easy access to government capital while the risk assessment for a Japanese company can take much longer."* (Latimer, Kim, Tahara-Stubbs, & Wang, 2009)

The linkage towards defence applications is perhaps the most intriguing part in specifying a relational role that China plays into the U.S. national security, that is, an undermining force that is not only a competitor on both military and economic terms but also technological and scientific. Highlighting the US dependency holds on REEs exports from China garners a sense of urgency as the economic giant is tightening its 'grip' on 'Rare metals'. *"China currently accounts for 93 percent of production of so-called rare earth elements — and more than 99 percent of the output for two of these elements, dysprosium and terbium, vital for a wide range of green energy technologies and military applications like missiles"* (Bradsher, 2009a)

4.3 Chinese strategy and silenced voices

"Deng Xiaoping once observed that the Mideast had oil, but China had rare earth elements. As the Organization of the Petroleum Exporting Countries has done with oil, China is now starting to flex its muscle." (Bradsher, 2009a)

The strategic potentials of rare earths indicate saliency of supply risk and resource competition between the two countries within a wider technological and economic (GDP per capita) framework. A definitive Chinese strategy had no grounded proof and neither does the suggested the pollution being 'beyond' the control of the state. Although China cannot be given credit for its current environment neglect but the country's efforts to tackle such problems were

merely mentioned in the selected articles or publications thus far. The rationale for this is that China is to be placed as an abstract subject of environmental concern because of its previous poor records in standards. The REEs industry of China serves as a form of supplement to the existing ideas of 'irresponsible' governance, plutocracy and corruption. All of which are supposedly absent in democratic countries.

In order to make sense of how supportive the media is to the discourse there needs to be an understanding of how the publications on REEs are structured in a methodical way to disavow Chinese concerns of their own domestic supply that served as the basis for industry consolidation. Most articles and research publications on REEs are characterised by a structure that is repetitive. Firstly, the news piece presents latest updates on the REEs 'competition'. China is then revealed to be the dominant supplier of the resources and its trade policies amount to be one of its strategies consistent to its 'rising' status. It is accused to be employing invasive tactics in order to acquire intellectual property for developing down-stream products, thus, dominating the entirety of the technological product chain. In light of the premise of the static scarcity paradigm that governs attitudes and informs policymaking processes on resources and energy, a trifecta linkage is established between rare earths' apparent scarcity, its application to military hardware and finally their role in developing green technologies at an age of energy conservation. China hoarding these 'precious' metals would not only pose a threat to immediate national security of the US but also the entirety of the human race. This formula aids the signifying process as repeated articulations convey the seriousness of the issue in a Neo-Malthusian sense. It plays yet another informative role that media is sanctioned to do so for enlightening the public and to transcend the *gravitatem* in their consciousness. Nonetheless, given the fact that the articles served to inform the public about the industry required the inclusion of discussions about how

China achieved this status as it 'caught the world by surprise'. This necessitates an insight into how the 'Chinese had done it' by also recounting the perspective of China on their strategy, questioning their seemingly benign intentions in a 'resource scarce' world. The New York Times series by Keith Bradsher offers an example to this structure that is replicated by succeeding publications in other outlines and even academic papers, technical or political, on the REEs case.

As any articulatory process would allow, the antagonistic voices or silenced voices are also visible. But while the Chinese perspective is given there is hardly any credit given for their claims. A quote on Deputy Director General of China's Ministry of Industry and Information Technology on decisions regarding finalities of REEs policies. "*China is very responsible. We will not take arbitrary decisions. All our decisions will be consistent with scientific development,*" (Bradsher, 2009b)

Despite the obvious Chinese domestic concerns for their own supplies, the Western perspective is deemed more important; and institutional regulations established by the post-War order reigns supreme with rules stipulated by GATT and WTO.

"Governments and companies in the West and Japan have become increasingly worried in recent weeks that China could halt exports of rare-earth elements. Susan Stevenson, a spokeswoman for the United States Embassy in Beijing, noted that World Trade Organization rules strongly discouraged export restrictions." (Bradsher, 2009c)

Here, the articulation of an unprecedented 'threat' is complete with the association of the decisions by the Chinese government as an effort or strategy to choke the West. The REEs policy of China has now been connected with the policies to that of the OPEC countries. Policies of

economic nationalism and resource nationalism as archenemies of neoliberal trade policies pursued by the Western powers since the Cold War.

“The Chinese threat has touched off a frenzied international effort to develop alternative mines, much as the 1973-74 Arab oil embargo’s repeated increases in oil prices prompted a global hunt for oil reserves.” (Bradsher, 2009c)

By equating China to that of the OPEC countries indicates perceived seriousness of resource scarcity, Bradsher outlines the prospects of actions that stem from geopolitical contests which would put Western interests into serious jeopardy. That is to say that in case of disputes or conflict as seen in 1973, exporting countries could resolutely impose restrictions and embargo against countries that are deemed to be at odds with their national interests. By the same token, rare earths are placed in equivalence to its other ‘scarce resource’ counterparts. Thus, it in effect silences the fact of rare earths’ relative abundance that is still economically exploitable. Further, this threat could be triggered at any moment because of the sensitivity of US-China relations, of which many issues between the two stands contentiously. In any case, the linkage to a 1973-like crisis with rare earths seemed enough as a major threat. The hunt for reserves derived from the example of oil has little proof of this claim which perpetuates the paradigm of the static scarcity when in fact major reserves are to be found in many countries including within the United States.

4.4 Congressional hearings: multiplying discursive economies

Discursive articulations of Chinese monopoly arguably reached the level of ‘high politics’ by early 2010. That year marked a first series of hearings at the United States Congress and reports from various other Federal agencies concerning the problem of US dependence over Chinese rare earths exports. Titled “Rare Earth minerals and 21st century industry”, the testimony

sought to investigate the extent of which America is dependent on China's REEs exports; and the implications of which would be detrimental to the U.S.'s efforts in reducing carbon emissions as green technologies require uses of REEs. It aimed to determine ways of redressing the imbalances of supply and domestic demand, the ultimate goal of which is to restore US primacy.

One of the first citations used in the hearing derived from a report of Australian Broadcasting Cooperation in 2009 which investigated the extent to which commercial and green technologies require stable supplies in the West and that China provides 90% of world demand.

The rare earth metals story is one lens through which we can view changing world economics, the ways and the pitfalls of how China integrates with the capitalist world, and global trade. China provides more than 90% of the world's supply of rare earths. The business media in particular is full of stories of how if the Chinese hold back on their supply of rare earths, your iPhone won't work. And more, much more. Climate change comes into it, too, because the green technologies are very dependent on rare earths. (Australian Broadcasting Corporation, 2009) (Rare Earth Minerals and 21st Century Industry, 2010)

Two major elements identified in the Chinese REEs strategy in its economic development in the same way the Financial Times article did: (1) the targeting of critical industries that are to be kept under government control; and (2) the use of subsidies and other incentives to attract foreign investment that will result in moving China's production up the value chain, bringing advanced technology into the country, and generating sophisticated exports. A "near-monopoly" of the industry was indicated but it did not describe an aggressive industrial or technological policy to dominate the market but merely to 'attract' foreign companies to outsource innovative technologies into China in efforts to advance its economy.

A host of witnesses include company managers of mining companies and mineral experts panelled to present on the issue and call for governmental responses. A definition for critical minerals was outlined by Dr. Stephen Freiman, President of Freiman Consulting, Inc. a participant to the hearing session as (1) difficult to substitute away from, and (2) subject to supply risk. Import dependence simply does not indicate the risks but rather with a combination of production concentration and geopolitical risks.

Mark Smith, chairman of Molycorp Ltd gave a presentation on the application of REEs and calls for urgent response from Congress on breaking U.S. dependency on Chinese REEs imports.

“However, it is the combination of three key factors that make this situation one of urgent concern to policymakers: 1) the indispensability of rare earths in key clean energy and defense technologies; 2) the dominance of rare earth production by one country, China, and 3) China’s accelerating consumption of their own rare earth resources, leaving the rest of the world without a viable alternative source.” (Rare Earth Minerals and 21st Century Industry, 2010, p. 49)

“Today, the production of rare earths, and the metals and magnets that derive from them, is overwhelmingly dominated by China.” (Rare Earth Minerals and 21st Century Industry, 2010, p. 50)

China’s REEs policy consolidation was treated as a reflection to its general industrial policies that seeks to attract foreign investments and encourage technology transfer in return for cheap raw material prices. This has been seen as a repetitive move by China to exploit cheap available resources for high-end advanced products for it is identified to be the ‘lack’ in China’s innovative sector and developing economy. It is diagnosed to be a fundament of economic

nationalism, a highly problematic trait that taints its image of attempting to be a responsible player in Western standards.

“[A]s early as 1998, China has started to limit the export quantities of rare earth products, and implemented the differentiating principle of ‘forbid, encourage, and restrict:’ forbid the export of rare earth raw materials; restrict oxides and metals by using export quota; encourage downstream rare earth products, such as high value-added products like magnetic materials and fluorescent powder.” (Rare Earth Minerals and 21st Century Industry, 2010, p. 65) The aims and intentions of China were highlighted with its consolidation moves of an end goal to *“establish a ‘China Rare Earth OPEC,’ form companies with absolute dominating power in the market so that China can be the leader in controlling international market price.”* (Rare Earth Minerals and 21st Century Industry, 2010, p. 65)

Solutions for the Federal government to the problematic ‘dependency’ on China was outlined as follows: *(1) [the US government] should be considering a second trade action against China on the range of export restraints being imposed on rare earths (and possibly other products); (2) support research efforts into the development of alternative solutions to current rare earth needs both directly through basic and applied research and through tax policies and other actions to support private sector research.* (Rare Earth Minerals and 21st Century Industry, 2010, p. 68)

Smith recommended solutions for alleviating U.S. dependency under the section that seeks to outline a strategic manoeuvre on “How to compete with China?” which included the abovementioned support fund from the federal government for research as China did so in order to regain dominance in the industry. Thus, to re-establish U.S. superiority requires unitary

support across agencies. Furthermore, he remarked that a combination of “geologic good fortune” and revamping of domestic production would be paramount to national objectives. (Rare Earth Minerals and 21st Century Industry, 2010, p. 57) In languages of war, he indicated that the ‘best attack’ lay in technology and American ingenuity in reducing production cost and environmental degradation in the existing processing techniques rather than plain ‘*subsidy war*’ that China allegedly wages against the U.S. (Rare Earth Minerals and 21st Century Industry, 2010, p. 70) Thus, it is the scientific sovereignty that needs to be sustained by re-establishing laboratories that would, for example, help to develop substitutes for magnets such as neodymium-iron-boron.

Furthermore, he attempts to mobilise the Congress in a concerted action against China by highlighting yet again another daunting prospect the US faces, of which it is the lack of manpower in to reinvigorate the industry. “*But we do need help in that regard. I have 17 scientists and engineers that are competing with over 6,000 Chinese scientists, and I can’t find any students from any university in the United States that have any rare earth experience or curricula today.*” (Rare Earth Minerals and 21st Century Industry, 2010)

Following the hearing came with “The Rare Earths Supply Chain Technology and Resources Transformation Act of 2010” or the “RESTART Act”, introduced by Senator Murkowski. It calls for re-establishment of the U.S. domestic REEs industry in order to alleviate current and future dependency. This was introduced based on the rationale of REEs application in defence technologies and production of renewable energy technologies. Congressman Coffman identifies China’s ‘*eroding ability – and willingness*’ to continue meeting 97% of world consumption as REEs producer; this came from various factors involving Chinese efforts to consolidate its own domestic REEs industry. The act calls for the U.S. government to place REEs to its rightful place as a strategic or critical material for national security; thus, there

should be a re-start of production and re-development of the supply chain in order to be '*self-sufficient*'. (Rare Earths Supply-Chain Technology and Resources Transformation Act of 2010, 2010a)

'[T]here is too much at stake for our military strength and our clean energy goals to ignore the problems we have in accessing affordable and secure supplies of rare earths.' (Rare Earth Supply Technology and Resources Transformation Act of 2010, 2010b)

The most crucial points from this proposed act are the calls for labelling REEs as strategic materials for national security and to restart the domestic supply chain on the basis of maintaining 'secure supply'. RESTART Act stipulates also the need to establish favourable market conditions for supply chain and the support for innovation, training and workforce development for enhancing the newly re-established supply chain in academic institutions, laboratories and the scientific community in general.

Since the push for RESTART act gained traction, other requested reports demonstrated efforts to alert the government and public over the criticality of this industry. Active engagements from various agencies (Department of Interior and US Geological Survey) to researching the extent of this crisis provide supporting findings. The joint-Scientific Investigations Report 2010–5220 served as a follow up to the technical reports series oversighting the situation of the REEs supply chain for the U.S. national economy. It was directed under the Defense Act of 2010 which required a study on REEs by federal agencies. The Department of Interior and US Geological Survey provide a general overview of the domestic and foreign industry; it firstly raises security questions over import dependence (as identified by the percentage of China's shares in the market since 2004).

“China’s position as the world’s dominant REE producer. Papp and others (2008) show that REE prices dropped dramatically from 1997 to 2008, consistent with the introduction of significant amounts of lower priced Chinese REE.” (Long, Van Gosen, Foley, & Cordier, 2010, p. 17)

In an investigation of how to measure supply risk, the report cites their European counterparts over which political risks are of important measurements based on the World Bank indicators.

“That a rare earth deposit contains reserves does not mean that it will be developed and mined—it means only that it is economic to do so...Reserves may also be undeveloped because of adverse land use restrictions, civil strife, and a host of other political and social factors.” (Long, Van Gosen, Foley, & Cordier, 2010, p. 18)

The bulk of the report examines different prospective mining areas within the U.S. that could alleviate the current dependency it finds over Chinese sources. Although re-establishing domestic industry takes over spans of 10 to 20 years, it nevertheless considers production from domestic sources as imperative to maintain constant supply. Additionally, supply risks would be reduced immensely if mining and production were within domestic sphere as identified by numerous previous reports. Here the authors argue that despite potential reserves in meeting demand but because of possibilities of it not being developed does not mean that a ‘threat’ is not a matter of fact.

A report by Marc Humphries, an Energy Policy analyst, to Congress highlights several points that other agencies and findings from studies that support for seeking a solution to alleviate import dependence of the US. Since there is a consensus amongst agencies on the

agendas, it is easy to note down the points of actions to be taken as suggested in the reports. Additionally, it is now arguable that up to this point of the multitude of publications, many of them speak in a sovereign-like voice over the 'criticality' of the elements to national defence and economy. They deduce clear 'lacks' over which industries in the U.S. are not "competitive enough" against developing countries due to higher labour costs and production costs, the REEs industry is an example of a 'dead' industry that experienced in the backlashes of 'unforeseeable' free-trade practices. The unchecked outsourcing of industries vital to national security slipped through the fingers of government control.

Humphries (2010) calls for a redress to the existing policies of their failure to identify elements that are 'strategic' or 'critical' necessary for defence purposes. Policy options are essentially the same as the suggested ones from the previous hearing which involves diversification of supply, exploration funds for USGS, establish stockpile and challenge China on its export policy. It is important to pay attention to the latter option because it was not entirely pushed as the most crucial step to take in securing medium or long term supply risks. Filing a WTO dispute acts as a short-term solution in order to check on the market power China holds and attempts to break it down. It arguably is a tool of 'economic warfare' in retaliation to perceived Chinese reduction of exports challenging WTO mandates. Thus, it would be practical to track how this option took shape in the succeeding years as the U.S., EU and Japan filed the case against China over its violation of WTO and GATT rules of its export restrictions. Can this be argued as ideologically enforcing the Liberal theory of history or another overture to geoeconomics? Or is it a combination of these as a new type of hybrid eco-economic-geo-politics? This is where both economic and scientific sovereignty of a country is challenged, and added to this is the economics that compounds the development of innovative technologies in

attempts to solve global or local issues such as environmental degradation and ecological disasters. Finally, the last factor of geo-politics of resources is brought back to relevance as countries are seemingly competing for land uses in agriculture, fuel production and mineral explorations by acquisitions in order to secure the most essential supplies of basic needs for modern society. (Gong & Le Billon, 2014) Thus, this perpetuates the static scarcity paradigm that most subscribe to in relation to the role of resources as future sources of conflict. It enables the diagnostic of looming crises which warn the effects of overpopulation, resource scarcity and pollutions, narrativised by a sovereign-like voice. These problems are localised and externalised to the developing countries as they should check on 'their' own population growth and energy consumption because these are diagnosed as problems that the planet faces today regardless of their developmental goals which started from a very low base.

4.5 Orientalist journalism

As discussed in the data selection criteria, media sources encompasses a majority for the topic of research because of their role in reinforcing the ideologies of core countries and reflects their interests behind the façade of national security. The way in which China is spatialized and demarcated as the dangerous 'Other' is typified in the next article. Although Jones' article (2010) was written for the British press, it nevertheless serves as the most interesting illustration as to how tabloid terror is created as well as cartographies of danger and environmental degradations that are all composite to the journalism that requires sensationalism and 'collective responsibilities' to report and address issues that are 'global'; all inspired by the geopolitical scripts of the West in assigning their perspectives of what is to be of importance. Written in January 2010 and eight months before the fishing trawler incident for the Daily Mail, the title reads as 'EXCLUSIVE: Inside China's secret toxic unobtainium mine'. It is one of the first

articles which reports from the mine pits of China where REEs are extracted as well as processed. Baiyan Obo, Inner Mongolia is one of the many REEs mines operating in China as was mentioned in previous USGS reports due to the mine's significance in total production. (Greinacher, 1981; Hedrick J. , 1997, p. 4) The article title already confirms the sensationalisation of this narrative with the choice of wordings, the capitalised 'exclusive' and 'toxic' denotes the urgency of this piece of writing and draws the attention of audiences. "[China] which has a global monopoly on the production of rare-earth metals...is now threatening to cut off vital supplies to the West." (Jones, 2010) The use of 'monopoly' as signifier is easy to associate China hoarding this precious 'securitised' metal that endows its "strategic" status; and the fact that it is crucial in the production of green technologies of which the West champions as forerunners. The juxtaposition of the use of 'toxic' in the title followed by this alleged hoarding or 'threat' to cut off supplies is tantamount as it allows the visualisation of China, itself being plagued with environment issues, is denying the world of the materials to help alleviate problematic by-products of heavy industrialisation and being an irresponsible actor in the global commons. It depicts a China that is ignoring its own plight of environmental malice and neglecting its role responsible for global commons for its avariciousness disguised by its benign economic aims and targets.

"It looks like a scene from an apocalyptic science-fiction movie. High on the frozen plains of Inner Mongolia, giant trucks rumble across the floor of a lunar-like crater so vast that it looks as if it might have been gouged out by a meteorite." (p. 1)

The *mis-en-scene* is set here by Jones as the Western observer who braved the toxic fumes and rugged terrain to arrive at a scene of destitute in order to reveal this story to the world as the 'first Western journalist'. Although it can be argued that this is textbook Orientalism, one can

connect this to the original arguments of Ó Tuathail's deconstructive studies of western geopolitics. It is an attempt to popularise this issue and raise awareness to the social with the help of these signifiers embedded as codes to consolidate the conventional wisdoms of China's neglect of environmental wellbeing and labour rights in pursuit of economic growth. Factual errors by Jones in describing the 'rareness' and 'scarcity' of these minerals helped drive this narrative of mysticisms of REEs. These include assigning the word 'unobtainiums' (without reference to any of the names of the 17 REEs) to these elements but as mentioned before, the rareness is ascribed due to the difficulties in production rather than mining as it is known that REEs are abundant on earth's crusts. The REEs are assigned with the 'rareness' in the same manner as gold and diamonds because of the way in which all of these resources share the same connotation with 'rarity' assigned and are found in the earth's crust. It is the fact that they all share the same beginning or sources in rocks that made them valuable because of the processing time and techniques required. This echoes to the gold rush or diamond rush throughout the 20th century. Additionally, it can be associated with the issues of blood diamonds as described by Phillip Le Billon over which resources have become conflictual between state and non-state actors.

"I was the first Western journalist to set foot inside the mine. What I saw at Baiyun Obo and the poisoned refineries it feeds raises disturbing questions about the future we are buying into - and who will control it." (p. 2)

It is the very fact that Jones was the first Western journalist that made the story more sensational and ground-breaking. He was the "first person" to discover and unveil it to the world as if he had conquered or infiltrated into the Chinese system, uncovering the mysticism of the tainted land as an explorer. The landscape is revealed as space of danger shrouded with toxicity.

These attempts to draw the attention of the world as a stark reminder of what stakes are present within the risk society; or how fickle modern conditions are because of its dependence on foreign sources beyond the control of governments or institutions with the same political agendas in the name of national interests.

“Describing how the mining business has transformed the small town of Baiyun Obo, he [a miner] explained: ‘The roads here were dirt tracks only a few years ago and the workers used to live in shacks. Now they live in apartment buildings. There are no beggars in this town any more. Anyone can make money out of these rocks.’” (p. 3)

Quoting the workers’ pride in their work to describe and visualise the economic transformation of China from poverty stricken to a relatively prosperous society demonstrated how an outsider would perceive the country. This highlights the spectacle and mythology of the economic successes of China given its state-capitalism that Westerners and outsiders seem to be curious of; thus, revealing the prospects of a general growth trend of the developing world as well as the illiberal trends that many are headed.

Furthermore, the author takes a further step in attributing the criticality surrounding these elements in attempt to act as the ‘revelatory’ role he is endowed with as an investigative journalist. Commenting on the environmental costs of processing and mining, the elements have in effect been demonstrated as a cautionary reminder. Thus, it proves yet again how fragile our conditions are and the costs ‘we’ (not only the West but the rest of the world ought to know) have attributed to from our exploitations. Despite China’s successful economic transformation it had come at a heavy environmental price-tag to achieve this. The appearance of a desolate war-zone denotes spaces of danger but also the very spaces that sustain modernity and one that is a

global problem. The territorialisation of danger and writing this barren and inhospitable land attempts to display China's disregard of their own environment or even associating the very culture of which modern China had built up itself at the same time sacrificed its own ecology and natural wellbeing within its borders. The land being scarred with 'toxic runoffs', evil-smelling toxic wastes and rusting machinery are helpful visual tools for depicting of a dangerous space that demonstrates our neglect for the environment; and thus it is problematized to the extent that there needs to be responses to this crisis.

4.6 Elements that rule the globe

The risk society depicted by Ó Tuathail is exemplified in the above article and can arguably serve as representative of the paradoxes and contradictions of the core countries scripting 'geopolitical issues' when in fact it is consolidating its own bias view of assigning where danger exists. The 'and' questions of arms proliferation, global warming, food shortages and resource conflict have transcended to threats without solid boundary demarcation as Kaplan (1994) argued. Rare earth elements have thus far also been assigned as a global problem but processes of reterritorializing it and relegating it back to the 'either' questions that the Cold War mentality served have already been at works. China is thus reduced to be a source of problems not only because it is perceived to be the sole producer of these rare resources that modern conditions need to sustain, but rather, it is because of the political system, the mysticism of authoritarianism that encapsulates the main concerns and the 'threat'. The source of this problem derives from China's unwillingness to democratise in the Western standard of which the liberal theory of history hypothesizes. A causal link is established with the fitting 'Elements that rule the globe' found in the article of how control of these REEs will enable the control of the world. Thus, harking back into the conservative view of how the world operates in a *parabellum* paradigm as;

Mackinder (1904) argued over the control of territories; Luttwak (1990) argued for economic primacy; and now over multitudes of risk factors such as resources, environmental conditions and scientific-technological innovations.

“China's decision to cut export quotas has already set alarm bells ringing. The United States imports all its rare-earths and more than a billion dollars' worth of goods consumed in America every year contain rare-earth elements.” (Jones, 2010, p. 6)

This coincides with what Luttwak envisioned in the *management problem* found in globalisation of which the US purported but became ‘victims’ of this as it offset the interests of vast majority of Americans. (Ó Tuathail, 1996, p. 235) Thus, it is imperative to understand yet again how a causal link had been established directly between consumer goods and policies of a country.

'If China was the only place in the world that rare-earths existed, there would be a war. There is no immediate crisis but a looming crisis that needs to be dealt with.' (Jones, 2010, p. 7)

The academia is quick to follow up on this established ‘crisis’ or ‘threat’ by addressing multitudes of implications for the West and possible solutions for alleviating itself from Chinese ‘control’ of these strategic materials. Cindy Hurst’s seminal research on the Chinese REEs industry was the first of many academic papers to examine this effect of increased Chinese market power and ‘how it succeeded’ in gaining dominance at the expense of the West (Hurst, 2010a). The title itself being ‘what can the west learn’ denotes similarly to Luttwak’s strategic outlook of *geo-economics*. It is arguable that Hurst’s paper serves as a cautionary reminder of scientific advancement of China superseded that of the US’s military industrial complex.

Hurst (2010a) begins with the definition of the REEs as usual for many other reports, articles; and their applications are briefly mentioned. The extraction process is detailed with a flowchart which demonstrates its informative nature. The aim of this report is to survey the steps of which China took to dominate in markets of strategic materials by 'stepping up its effort in the academia'. Hurst cites that the success of the REEs industry in the US attributed from Mountain Pass, CA as it was the world's largest supplier in the 1970s. This was achieved through the combined efforts of researchers' interests in this particular field during that time. She problematizes the current drawbacks of the academia or the lacking in the U.S. *against* China. This stemmed from the fact that research interests of REEs in the U.S. waned due to new technologies being discovered and that researchers 'gravitate' towards what is new and popular in order to pursue them. On the other hand, there is a continual interest of REEs on the Chinese side and that overseas Chinese students who studied at the Ames National Laboratory run by the US Department of Energy return to China to be replaced by another.

The 'frontier' effect begins with the visualisation of Chinese students flooding the universities and research laboratories of the US. Because of the previously acknowledged technological superiority of the US, it is seemingly being under threat by encroaching Chinese students that resulted in 'overtaking' US market power of this sector and soon the entire technological innovation sector.

"China's academic focus on rare earth elements could one day give the country a decisive advantage over technological innovation." (Hurst, 2010a, p. 6)

Here, Hurst cites the strategic outlook provided in the 863 technological program initiated by the Ministry of Science and Technologies and envisages a Chinese domestic technological

innovative base being the most crucial efforts to gain strategic advantage in the foreseeable future. It is a means to understand the extent of which China is striving to 'out-smart' the West in this new technological race of the information age. This was consolidated, as argued by Hurst, by the existence of two only academic publications on REEs and both are in China. The *Journal of Rare Earth* and *China Rare Earth Information (CREI) Journal* are the two journals, and both under the auspices of the Chinese Society of Rare Earths.

Furthermore, Chinese acquisition of companies and mergers have been attributed to its 'domination strategy' in the magnet production chain as well as the REEs industry overall. This was highlighted with the 'successes' and 'failures' of Chinese SOEs to acquire mining rights in countries as well as increasing its shareholder in foreign REEs production companies. The purchase of Magnequench and the subsequent outsourcing of labour and equipment from Indiana to China came 'the day after the deal to keep Magnequench in the U.S. in 2002' (Hurst, 2010a, p. 13). However, the attempt in 2005 by China National Offshore Oil Corporation (CNOCC) to acquire Unocal, which at the time owned Molycorp and Mountain Pass, did not materialise. This was argued by Hurst to be of strategic importance because of the energy security and it would have also been a 'huge blow' for the future restart of REEs mining and production in the U.S.

Moreover, the importance of NdFeB (Neodymium-iron-boron) magnets are highlighted in their multifaceted applications and emphasis rested on defence applications such as lasers and satellite links. Once this is established, Hurst continues to detail the extent to which China had sought to harness this resource through deals with foreign countries in what seems as a race for resources. Thus, it furthers the argument of the scarcity paradigm that most subscribe to in face of a dominant producer of non-renewable resources. REEs are treated in the same vein as oil, this cautionary reminder of the fickleness of modern conditions dependent on a single source enables

the Malthusian vision to take precedence and help reinforce the perceived threat based on this 'lack' of US primacy in this industry. America is depicted here again in what Luttwak envisioned of the geoeconomic competitions that governs international politics of the post-Cold War era. Here, the narrative pictures not only economics but scientific and academic frontiers that are vulnerable to invasive tactics of China.

It is rather hard to fathom to what extent does the 'threat' stretch towards because of the initial investigation or definition of REEs being hoarded by the Chinese. But the next section of the report is devoted in examining problems China faces too. Hurst cites Chinese sources on problems regarding lax regulations, environmental repercussions from illegal mining, smuggling and 'cabbage' pricing that have rippling effects on its domestic demand and consumptions. This is followed with a lengthy account on the ecological problems from the by-products in the processing of REEs. Water contamination and tailings (radioactive wastes from separation process) are identified as main culprits of degradation for the lands in Bayan Obo. These problems of environmental concerns are then causally linked to the Chinese system itself. As Hurst (2010a) points out *"Investment could be suddenly lost because the government can choose to take back the land... [And] the Chinese government does not provide any financial support to help companies meet environmental standards."* (p. 17) Furthermore, it is noteworthy of how the report continues to be informative by stating out facts that highlight the multitudes of problems that attribute to Chinese governance. This adds further to the dangers of uncontrolled modernisation as well as lax governance and cautioning the hazardous nature of these technologies of which modern society depend on. It establishes links to China's domestic political system which denies investments and private ownership of resources. Thus, the dichotomous difference between Western society and Eastern society is thus depicted in a

traditional manner, *“in Western society, if an employee dies or becomes ill, repercussions could include a lawsuit or life-long pension which the company is obligated to fulfill. This is not the case in China.”* (p. 18)

The chaotic ‘Orient’ has not been transposed to the nominal West yet but is nonetheless presented to the West as a threat and an ‘awkward’ responsibility because of the leadership it heralded in this particular research field before the turn of the millennia. This responsibility is somewhat derived from surveying of environmental repercussions of extracting and processing the REEs but at the same time not fully engaging with the fundamental questions of how to develop or synthesize better processing techniques in order to reduce the environmental consequences. But rather, it could be ignored because it is spatially located far from civilisation in the Western perspective. There is a blur over responsibility because despite the damages being located spatially far away it also resonates to domestic audiences because there is a general concern to such problems. However, the report lacks further explanation over which the production of REEs had contributed thus far to the efforts in building green technologies as well as China’s resolve to pursue the same path. Further, there is absence in discussion over the complicated processes that dictate entireties of the technological industry. An example would be that many of the high-tech products are still manufactured in China given its demands in the industrial sectors to produce the end-products. Thus, the Chinese production of REEs represents another case in example of what the country provides for the world along with other goods that are crucial for modern conditions but it is distorted in such a way that somehow it was politicised and demonised. The fact that workers are exposed to hazardous working environment or harsh conditions similarly to the Foxconn incidents provide stark reminders of how Chinese labourers are treated in dreadful and inhumane manner without dignity. These depict the dichotomous

juxtaposition between East and West, the 'chaotic' and 'order' societies. Needless to say, they are the result of unconditional and unregulated globalisation that are problematic not exclusively to China but to many other developing countries in Asia, Africa and Latin America. These are the hidden dimensions of which the developed world 'doesn't see' because the rest of the developing countries are produced to be 'unreachable' places in the world that are blanketed and temporally static. The ingenuity of constructing discursive boundaries separates civilisation and hostile land results in the blurring of responsibilities. Instead, it pushes these responsibilities to other dimensions away from 'public view' (that is the sovereign view of the First world). By that it means developing parts of the world are seemingly traced as sources of conflict but also abundant in materials fuelling the global economy. Furthermore, the developed world's perception of the government responses such as increased environmental laws regulating illegal mines and restricting export quotas in a wholesale effort to clampdown on domestic industry as threatening epitomises the paradoxical nature of these attitudes towards developing countries. This fittingly reveals the discourse of which this research partly seeks to find out.

"China could easily create more stringent environmental regulations as a front to cover up its poor image." (Hurst, 2010a, p. 24)

Hurst's report provided an insight to the industry and the most crucial part is the vertigo as argued by Ó Tuathail over the mismanagement of globalisation and the continuation of the *geoeconomic frontier*. However, a new 'frontier' had *de facto* begun which denotes similarly to Mackinder's call for the introduction of the geography discipline in Britain. Here, it can be seen that the technologies the West had invented and perfected in years 'falling' into the hands of the 'Other'. Strict demarcations have been provided in order to raise alarms over the complacency of

the West to let technologies to be leaked. It calls for the protection of scientific sovereignty as well as commerce freedom, replacing territoriality with other tangible assets for state survival.

"It took the rest of the world nearly 20 years to suddenly wake up to the realization that the future of high technology could be in the hands of this one supplier." (p. 25)

It is obvious that an imminent 'threat' had been identified and that is the implications of a Chinese monopoly. The question remained therefore was the resolution and measures to alleviate this dependency for the West and the U.S. especially. A causal link was established with the decreasing availability of resources to 'national security' because the industrial base of the US is being further eroded. Thus, as Hatch (2010) points out, government action was deemed necessary.

The threat gauge is raised yet again with China's announcement of further export reduction (Tse, 2011) as well as centralised pricing system to gain a fairer share of the market; and this is all laid out by the Ministry of Commerce. Japan, a net importer, had already taken measures in advance to ensure functioning of supply chain with a stockpiling system as a response to the gradual export reduction. However, it is also the downstream products that are most affected with magnets receiving the most attention because they are more diverse in terms of application.

Mark Smith, CEO of Molycorp, Inc., would no doubt agree with the latter observation.

"China is doing what it feels it must in order to maximize the value of their resources, improve product prices, improve their environmental practices and continue to create jobs in downstream manufacturing businesses in China, which have all been key policy goals of that nation." said Mr. Smith. "They are clearly trying to leverage their > 97% supply position in rare earths to achieve that. Frankly, we hope the US will begin to emulate similar efforts as we get

back to producing American rare earths in sufficient quantities to meet our own domestic demand." (Hatch, 2010, p. 3)

With the established potentialities of a Chinese threat derived from its maximised industry share and the technologies that aided its ascendancy, rare earths as resources that are non-renewable so as it seemed are to be paired with other resources like oil which precipitates conflict in an age of resource scarcity.

4.7 The geopolitical link

The media driven discourse in the summer of 2010 has been fundamental in the production of the 'REEs threat'; and the processes of reterritorialization of global issues had gained momentum prior to the fishing trawler incident in September of the same year. The link between potential geopolitical flashpoint to the REEs case was unapologetically established by Evans-Pritchard (2010) in *Hot political summer as China throttles rare metal supply and claims South China Sea*. Although it may not reflect the attitude of policymakers or elites concerning the South China Sea; it can still be argued that it had been achieved as a signifying force to rearticulate the dangers of an emerging China. The securitisation of resources with linkage to territorial disputes converges as a meta-discourse in constructing the bellicose images of China as a bully. This reflects the cartel identity assigned to it in the same fashion as OPEC had achieved; and thus highlighting the original arguments of resource dependence as conflictual. Although vastly different from the situation which dictated the events in 1973, there are similarities that could be drawn. In the case of the South China Sea, it involves multiple middle-powers pitted against an emerging regional power. The military weaker Vietnam and the Philippines are contending against China for sovereignty on previously *uninhabited* islands of the South China Sea. Their existing hedging strategies include reactionary assertion to territorial claimants through the international justice

route, diplomatic channels and military cooperation with the US-led alliance in the region. China had been assertive too with previous military confrontations with Vietnam in the 1980s and continues to exercise its sovereignty on the islands by developing the islands as 'defensive measures'. Nonetheless, the focus rests on the linkage of the two geo-conflicts found in this particular scenario. It is the utilisation of the geopolitical perspectives as lenses in contributing to the refined construe of resource representation to conflict. Both territories and resources are reinstated as origins of conflict. The suggestion of 'blockade' or supply chain disruption had already become connected to a dangerous prospect as an irresponsible maneuverer that China pursues for advantageous gains on all frontiers operating within the *realist* paradigm. Kaplan's vision had become salient and is interchangeable to possibly other issues that China is already at odds with the West.

The *geopolitical signifier* most prominent is the 'bully' role here. As the largest military power in spite of U.S. presence, the PRC – at the time as well as now – has been increasing its maritime capabilities to assert what they claim as sovereign territories over islands of the two disputed seas. But because of this, middle powers perceive their own security being under threat, thus, a delicate hedging system had been established in order to check on China's actions. The main problem persists because of the nature of China's emergence and the perceived insecurity of surrounding states have made the security dilemma ever more serious as states still operate in the *realist* paradigm. East Asia had framed itself to be a *geopolitical* contestation ground and thus, revived competition over demarcation of territorial boundaries. States continually compete for territories despite the end of the Cold War; the ideological conflicts have dissipated to be replaced with objective, rational and strategic calculations. Classical interpretations of geopolitical reasoning have made their return resonating what Kaplan cautions for the revenge of

geography. The combination of conflicting parties over territory and resource are telling signs of spatialised battlegrounds. The South China Sea has become a hot-zone for potential conflict and instability. Within this arena stands the giant 'bully' who is not hesitant in asserting its power on the region as it had done so historically.

The revival of classical geopolitics had been aided by the *geoeconomics* in reconstructing the dictum of the state as an organic unit, a geomorphic entity that expands in the Kjellian sense. China is reduced to the identity of the imminent *threat* – or the 'German neurosis' – because of its 'expansionist' tendencies and its ability to harness material powers from its rise and benefit from 'unregulated' globalisation. Thus, it is the essence of which the country is captured to be this inscrutable and ancient mythical political entity that is large and militarily powerful prior to the modern era and a once-before regional hegemonic power seeking to *rejuvenate* itself to gain dominance in East Asia's *powerpolitik*. The stakes are raised higher despite the non-direct *threat* perceived of China being a bully in a far distant region. However, the moment that fixated both *geos* reinforces the articulated danger of what is to fear. A power competition between states have become a matter of concern because of the prospects of the 'blockade' of resources – and possibly other trade goods – due to such *geopolitical* contests. Suddenly there is proximity to the conflict and is directly affecting the public consciousness. A Chinese 'blockade' or supply chain disruption would have rippling effect over the livelihoods of the people because of the REEs applications in electronic devices, the tablets and phones people use to read and watch such stories. It is able to capture the imaginations of the public of an environmentally negligent and authoritarian country that decimate its own land in order to control entirety of modern conditions for its political advances of a far-away region. This is the way in which the construction of *geopolitical identity* of the self in face of the other by using coded languages to reduce this

political entity into an observable and controllable one. Furthermore, not only China is captured to be an imaginary of threat but the entire East Asia region is unified into a scene of future conflict with a 'thousand year feud', or as Kaplan put it in a later book 'Asia's Cauldron'.

4.8 Articulating 'bully' through monopoly and blockade

On 7th September 2010, a Chinese fishing trawler struck two Japanese coastguard vessels in the East China Sea in attempt to resist arrest but the Chinese crew were promptly detained. This resulted in a diplomatic spat between the two sides as the fishing trawler was operating within the waters of the contested islands in the East China Sea. The contested islands were the Senkakus/Diaoyue and are owned by Japan but claimed also by China. In the midst of this sabre rattling game between the two sides emerged the allegations of an embargo imposed on Japan by China. It is not useful to pinpoint which exact news piece mentioned an alleged embargo but the reports arguably speak in a unified voice of such occurrences sourced from Japanese officials. As a result, news circulation of this established link of a political bargaining chip became the focal point to the sorry affair. Previous postulations of this geopolitical crisis have become a 'reality' even though it had been inaugurated to such degree (even though it focused on South China Sea, rather than the trawler incident which occurred in the East China Sea) prior to the event of the incident. To examine in detail over the extent which the 'crisis' had been popularised and ascribed to the narrative requires looking into how the media became a political tool of knowledge production. The media served the role in consolidating the hegemonic articulation which necessitated the causal linkage of geopolitical contest to trade disputes and to be resonated throughout the public and political spheres, thus, arresting any differences that would support China's justification claims as mentioned previously. The difference presented here is the view of China's continual export reduction as a general trend rather than the premeditated embargo

imposition against Japan and net importers. However, the legitimising argument of general reduction trends is 'arrested' or marginalised with repetitive equivalence of China's performance or reaction in other disputes with the US. It maintains a 'predictable' pattern that resource nationalism incline to enact – irrational, malicious embargos as opposed to rational and diplomatic manoeuvre in crisis resolution.

"Resource bullying is nothing new." (Auslin, 2010) This alleged embargo is treated as the abovementioned geopolitical link to resource competition and conflict. Furthermore, the diplomatic resolve of Japan is praised for its preparation to send delegations in order to negotiate trade terms with China since it was established before that China's imposition of export quotas had been on the rise prior to the incident.

"This kind of calm and rational approach suggests an admirable maturity in Japanese diplomacy, but it is also a realization of Japan's inability to mount an immediate, formidable response without adverse consequences for its own public." (Auslin, 2010)

China is reduced here to be an irrational actor in international politics. In light of the arrest of the Chinese crew, the government had been scripted to impose the embargo on Japan as a 'knee-jerk' reaction given the monopoly status it had been inscribed to be.

The weeks following the collision saw discussions over the REEs story with the focus on implications for US national security. Debates over whether US could mitigate supply risks and avert similar crisis Japan faced were ubiquitous especially when links to defence applications were firmly established. Paul Krugman (2010) spoke of the 'disturbing' facts over US complacency throughout the 2000s in letting materials and equipment for extraction crucial for national security slip from the government's grip wherein this concept is the primary focus of the

Bush administration. But instead, “the Chinese literally packed up all the equipment in a U.S. production facility and shipped it to China.” (Krugman, 2010) Furthermore, Krugman notes the ‘trigger-happy’ Chinese policy makers to use such manoeuvres to initiate economic warfare and breaking WTO trade rules is hardly a ‘responsible’ stakeholder would do, thus, denying China’s status unapologetically based on loose facts and unconfirmed sources. However, Thomas Barnett disagree the extent of this threat contending that the world simply let China dominate the industry by abandoning their own mining operations based on the rationale that it is ‘very expensive and very environmentally damaging.’ (Barnett, 2010) He argued that the monopoly did not exist despite China being the principal supplier but because it only holds around 30% of world reserves and REEs could be mined in many other parts of the world. In his opinion, if the materials are considered strategic there should be cooperation with allied countries a long time ago. Jack Lifton of Technology Metals Research share similar views that nobody paid attention to the rare earths industry over the years because of its size relative to other industries. *“We cannot continue to pretend that we're outraged that China has a monopoly on the supply of rare earths when we're the ones who gave them that monopoly,”* (Buckley, 2010) On the other hand, in addition to Krugman’s assessment of Chinese intentions and rationale for the strategic manoeuvres against US allies with its newly found economic and resource muscle, he also compares this with the resource nationalism that the OPEC played as a pivotal role over oil production and manipulation of prices forty years ago. In this reductive statement, he summarises the similarities of the two types of resource nationalisms, *“The result was a monopoly position exceeding the wildest dreams of Middle Eastern oil-fuelled tyrants. And even before the trawler incident, China showed itself willing to exploit that monopoly to the fullest.”* (Krugman, 2010)

In contrast to previous statements made over strategizing a game plan for alleviating US dependency on Chinese exports, Mark Smith of Molycorp shared similar views with Barnett over the actuality of this Chinese threat and saw the Chinese regulating measures 'commendable' (Aredy, 2010). It is rather mysterious for someone who previously outlined a strategy to counter China commenting on how successful the Chinese had done to consolidate their own industry at the expense of US benefiting from lowered prices and stable supplies. These statements run counter to the conventional wisdom of acknowledging the moves by China as a 'strategy' intended to wage economic warfare against the Western allies given the reports of the embargo. Smith was noted for even praising the measures taken by China to impose further export quotas that were seen as the source of threat to American national security and *contra* to free trade practices. *"I really admire what they are trying to do to correct the industry as a whole,"* (Aredy, 2010) In full 180 degree turn, Smith added that the export cuts that continued throughout the 2010 as announced by the Chinese Commerce Ministry would provide short-term benefits and that long term sustainability of the industry would require combined efforts of the major producing countries, that includes China too. Again, this would no-doubt be contradictory to his previous calls for support for his company's development of a mining-to-magnet strategy. (Rare Earth Minerals and 21st Century Industry, 2010, p. 48) He remarked also that there were no signs of supply disruptions since the trawler incident as seen in Japan. (Aredy, 2010)

In spite of Smith's new perspective of the trade as an expert, his views are not shared by other commentators as the geopolitical implications holds precedents. China was continuously marked as the bogeyman to be dealt with. Tim Worstall (2010) cements the contest of which China brought itself to so the writer argues in an article for *Foreign Policy*. *"You don't bring a Praseodymium Knife to a gunfight"* the writer unwittingly writes of an imminent trade war.

Furthermore, he speaks loftily of these 'good old-fashioned industrial aggression' to be met with sufficient political will to break the monopoly because he insisted on spectres of monopoly exercised by Beijing for its *geopolitical* ends. For Worstall, breaking the monopoly would be a task for the West now that people have started to realise the potentials of disruption to the high-tech industries as many others have noted in previous articles and publications. But it is understood that this is not an easy task. The article, like many others, traces the origins of this rise to dominance of market power due to the fact that China had the human resource (cheap labour) and environmental complacency to compete with the West. These are reinforced as articulatory practices in restructuring the narrative of China as the 'factory of the world' and the ecological disasters that brought with it, a threat also to the world as opposed to the West's concern for the environment.

Despite incertitude and speculation over whether the Chinese government actually did use REEs as bargaining chip over territorial dispute, this had been marginalised. Further reductions of export quotas had been announced with the previous justifications of dwindling reserves due to soaring domestic demands. Although the placed *geopolitical signifier* of a political leverage had been assigned to the Chinese REEs policy, emerging additional signifiers include violations of WTO rules have surfaced which confirms the Western fears as equivalence.

"World Trade Organization rules bar countries from restricting exports of materials so as to force other countries to buy value-added products, but the rules allow export restrictions for the purpose of conserving natural resources." (Bradsher, 2010a)

China's rationale for further export reduction on the basis for conservation and environmental concerns have also been noted in succeeding articles but the main focus rest on

repercussions to downstream manufacturing industries were more prominent. These justifications by China remain marginalised as they are not representative to the interests of the Western public but rather a threat. Conversely, the environmental degradation as a result of excessive mining in meeting demands has been relegated to issues that concerns China only and it is perceived to be peril of their own making.

Equipped with the same journalistic style as seen in the article by Jones, Bradsher continues the investigation on this mysterious monopoly China possesses that is attempting to choke the West. Locating the source of the problem is perhaps the most effective way of presenting facts and consequences of sensitive topics in light of the ongoing crisis. Unregulated mining, identified to be a major reason for China's ascendancy to be a dominant supplier, is demonstrated here of the risks and backlashes of bad governance and poor regulations. Beijing's crackdown had been on the rationale of protecting livelihoods of people and those who are harmed by the ecological disasters derived from mining operations. As to the resentment of local population, the government is criticised to be ineffective in dealing with such problems.

“China mines 99 percent of the global supply of heavy rare earths, with legal, state-owned mines mainly accounting for the rest of China's output. That means the Chinese government's only effective competitors in producing these valuable commodities are the crime rings within the country's borders.” (Bradsher, 2010c)

Scenes of violent crimes permeate in the Southern mining regions in Guangdong province as described by Bradsher. It depicts lawlessness and fear amongst the local population as the operations were mostly run by syndicates who disregarded the environmental damages of

archaic processing techniques which include pouring tons of sulfuric acid into pits which are seeped into streambeds contaminating water sources to nearby villages.

“The gangs reap profits that can rival drug money, while leaving pollution and violence in their wake.” (Bradsher, 2010c)

“The Chinese government office that oversees rare earth policy, which operated with considerable independence for many years, was moved early last year into the Ministry of Industry and Information Technology. That ministry, formed only two years ago to draft plans for global leadership in many industries, has emerged as a bastion of economic nationalism.” (Bradsher, 2010b)

The choice of placing *economic nationalism* is significant as presented in the discussion from the literature review chapter over classical thinking of geopolitics and geoeconomics. It is presented as the dichotic ‘Other’ in face of neoliberalism. This is an affirmation of the salvage for the ‘End of history’ theory that had driven Western political discourse of the 1990s. Placing the Ministry of Industry and Information Technology (of the PRC) as a ‘bastion’ of economic nationalism denotes an edifying counter-force to globalisation, an anti-modern attitude towards ‘civilising’ gravitational force embraced by liberalising and democratising economies of former Eastern bloc countries. Furthermore, it is epitomising the vestiges of nationalism, a relic from the 19th and 20th century incompatible to contemporary globalised interdependent world. Thus, it helps to distinguish progressiveness of countries that embraced neoliberalism from that of the backwardness found in state capitalism.

“But the interruption in rare earth supplies is the latest sign from Beijing that Chinese leaders are willing to use their growing economic muscle.” (Bradsher, 2010b)

Echoing the GAO report (2010), ‘*“DOD has not yet identified national security risks or taken department wide action to address rare earth material dependency”*. Furthermore, in order to restore the industrial and scientific sovereignty of the U.S. there should be ‘geographic centers of excellence to improve methods for extraction, processing, use and recycling of REEs.’ (Luft & Vorona, 2010)

In conjunction with the construction of the discourse on the political arena, the US administration addressed this issue and then-Secretary of State Hilary Clinton stated it as a ‘wake-up call’ to the industrialised world over which the dependency of China would be detrimental to national security. (Lee, 2010) Although there is no explicit politicisation or causal link to possible ‘embargo’ or ‘political leverage’ stated by the US administration regarding this incident but the threat gauge is already resonating. A demand for clarification of the Chinese policy was to be the first of many steps to securitise this particular material as the articulated threat seemed high, and calls of diversification of supplies in freeing the dependency is already underway as it offers the most viable solution.

‘China's true challenge to the West—indeed, its winning strategy—can be found in its ambitious modernization goals this coming decade. Set out in obscure committee directives and benign national policy choices, these are its best-laid plans.’ (Policy Innovations, 2010)

In reflection to the report written by Hurst discussed previously, there can be connections made in conjunction to the articles and reports analysed here. Hurst’s discussions of Chinese efforts to ‘dominate’ the industry was rooted not strictly to the ‘strategies’ pursued in gaining solely market dominance. Rather, it was the efforts of the scientific community of China which

helped the country in gaining primacy in this particular industry because of collaboration between researchers under government sponsored programs. (Hurst, 2010b)

As Beijing was scripted to cut off the world with series of stringent quotas, the cherished visions over successes of free trade and an employment-enhancing "green economy" are facing the tough reality of mercantilism, sourcing monopolies, and an obscure world of technology metals that are rather hard to mine cleanly.

In recall, "Monopoly", "dependency" and "blockade" are treated as empty signifiers, and they are ubiquitous in the discussions thus far over REEs. With respect to the US-China trade relations imbalance, it accounts for one of the many other issues in this asymmetrical problematic. Similarly to the currency manipulation affair, it suggests "unfairness" and "manipulation" of the Chinese side in gaining advantage and is articulated to be as the "Evil communist regime". The ways in which the regime encouraged SOEs merging with lower-cost mining and REEs projects are associated with economic and resource nationalism that are at odds with the ideological assumptions of liberalism and *laissez-faire* trade regimes the U.S. champions as its identity and psyche. Suffering from supply-risk and potential embargo as Japan experienced posed as a threat not only to national security but also the benignity, divine providence and American exceptionalism of being the bastion of liberty. As covered above, China's Ministry of Industry and Information Technology is scripted to be pitting against the entirety of the free world.

Continuous inscriptions of 'monopoly' and its associative terms points to the objects and ontological purpose of the empty signifiers in this relational difference that emphasize on the lack through the aforementioned articulation process by different discursive evidences shown

above. The U.S. is signified to be lacking in “control” or “primacy” because it *was* the sole miner and manufacturer of REMs for technological advancement prior to the 1980s. Consequently, there lacks the primacy it sought to be as the largest and most successful market economy in the world and the world’s greatest innovative base for scientific advancement and human achievements destined to enrich human lives with solutions combative to current ecological crises and other problems.

As suggested in the testimonies given by expert panels from the hearing (Rare Earth Minerals and 21st Century Industry, 2010) as well as publications like that of Hurst’s report; in order to restore primacy at the technological and economic frontier, there necessitates filling of the lack. That being revitalisation of the supply chain to alleviate dependencies and supply risks; or simply, file more cases at the WTO as exemplary for international law. These proposed solutions are assigned as nodal points in order to fill the lack – the loss of American primacy, technological leadership, cherished liberal values, and masters of the capitalist market. Thus, it behooves the taming of this Chinese monopoly and ‘reorienting’ its evil intentions by penalising it for acting not accordingly to the WTO. These practices help arrest uncertainties of Chinese justification for consolidation demonstrated in its staunch trade policy through the continuous articulation of this hegemonic discourse; in effect they attain the status of the universal solutions to the current predicaments. Furthermore, this placed solution of ‘breaking the monopoly’ through political will is the supposed testimony for reinvigorating ‘primacy’ and break the shackles of Chinese control, thus, restoring full sovereignty and U.S. identity as well as the Liberal Theory of History.

Taking the similar strategies to exert influence on the US Congress as well as the relevant Federal agencies and departments over correcting the identified problems of ‘currency

manipulation' (Nymalm, 2013, p. 398). Members of Congress, in a concerted effort wrote of the urgency calling for re-establishing American primacy with the eventual goal of securing US economic growth and solutions national security 'threat' derived from Chinese monopoly. Senators and Congresspersons wrote separate letters urging different Federal agencies to address US vulnerability to REEs supply risks because it depends on an unreliable foreign supplier. China's anticompetitive practices are labelled as "exacerbating global supply problems" (Stabenow, Schumer, Casey, & Whitehouse, 2011). The letters called for securing this material by prohibiting foreign investors from China to participate in US mining explorations and purchases, and reassessment of the REMs of their strategic value as opposed to DOD's initial report on stable supply of just light REEs when in fact it is the heavy REEs that are crucial for defence applications.

Members of Congress arguing for the shift of attitudes towards continuing this unbalanced trade can be viewed through the critical lens as proposed in the theoretical framework in Chapter 2. It effectively highlighted the marginalised problems of complacency by the government in allowing materials used for defence purposes to be outsourced to non-allied countries (Begich, Murkowski, & Coffman, 2011) which created the dependency in the first place. Furthermore, there is a neglect of the discussions or debate over the national trade policy in general. The integration of China to the global trading system with its ascension to WTO in 2001 resulted in dependency and the Chinese export control regime was working at full swing throughout the decade in the name of industry consolidation and prevention of further environmental degradation. Could this define the complexity, or better more, the ironies of the LTH agenda with respect to its aims? Furthermore, the articulation of China as the innate 'Other' that is superimposed to the framework of exploiting the liberal trade system runs contradictory to

the ecological goals set out whereby both countries are accountable for as the largest carbon emitters of the world. Overall, the geopolitical link is a *coup de grâce* for the LTH and the idealist credence of what it would have delivered. Enabling governmental actions to oversight the industrial basis for REEs supply chain runs contra to the principles of free trade because it connotes nationalisation of minerals and intervention to the market shift towards diversification by production companies as Molycorps aimed to fill in this literal 'lack'.

4.9 Restoring primacy

The fishing trawler incident in September 2010 was a *geopolitical flashpoint* in which China's projection of power has been causally linked to a wider threat gauge. By this time, the 'monopoly' of China as a threat has been solidified and finally caught the attention of the world. In spite of previous calls for Congressional and Federal actions, fear has resonated to multiple sectors because it in effect concerns them in ways that is proven to be unimaginable. Modern conditions scripted to be under threat from an irrational, 'trigger-happy' and defeatist tyrant that is unable to understand principles of free market and fair competition. Now it is biting back because it seeks to subvert the East Asia regional order and is being a 'bully' in the region, aggressively expanding its capabilities under the guise of territorial integrity.

Firstly, this crisis was reflected almost immediately in a petition from the United Steelworkers' over unfair practices by the Chinese which "*include discriminatory laws and regulations, technology transfer requirements, restrictions on access to critical materials, and massive subsidies that have caused serious prejudice to U.S. interests.*" (United Steelworkers, 2010) The anti-competitive practices are understood to be undermining the contesting spirit of neoliberalism, U.S. leadership in the clean energy economy and the world economy. The select committee on energy independence and global warming chair Edward J. Markey (2010) wrote of

the same urgency to the administration over the threat of Chinese monopoly and describes the linkage of the REEs policy as political leverage demonstrating the elements' "unacceptably high strategic value". Again, not only commercial and military applications of REEs are important but also the ecological efforts of the US in developing green technologies were argued to be under threat.

The Rare earth caucus, in response to the emerged threat of Chinese export restrictions wrote a bi-partisan letter to the US trade representative Ron Kirk. It urged the USTR to file a lawsuit against the PRC's export quotas that are "illegal" and that the supply risk is real because of the 'embargo' against Japan. Recognising the inconsistency of the export restrictions China imposes over its REEs industry, not only reinstating the domestic supply chain is necessary but also to correct the 'wrong-doings' of China.

'Accordingly, it is in our best interest to vigorously pursue our options before the World Trade Organization related to Chinese rare earth trade policy.' (Press Release, 2011)

The letter mentioned also the 'brazening' attempts by the PRC to use resources as leverage for political gains against Japan. Aside from potential impact on US national security because of the REMs applications and the magnet derivatives, it also hinders the development of the US domestic green jobs economy, energy security and technological sectors. The rationale behind the sought for legal actions resonates an overarching theme of imagining a 'lack' that the US has with regards to its economic performance undermined by industrial outsourcing and anti-competitive nature of foreign countries which ultimately jeopardizes American workers.

As directed by the National Defense Budget of 2011, the DoE (2011) submitted the report in accordance to the requirements set by the act and outlined the detailed report which examined

the industry itself. The findings of the assessment over criticality named several elements to be critical in the short and medium term. (see **figure 8**) Following this, the academia was once again triggered in responding through discussions as the strategic spotlight was shunned onto REEs and resources in general. It is gaining interest in this topic on the domestic front as Hurst argued as the reason for decline in research and studies which led to the loss of primacy. Mineral strategies and policies in face of a 'Malthusian end-game-scenario' as the ultimate consequence (Kooroshy, Korteweg, & de Ridder, 2010; Coppel, 2011; Blakely, Cooter, Khaitan, Sincer, & Williams, 2011; Looney, 2011), prospects of mining explorations in other parts of the world to diversify supply chain (Simpson, 2011; Jepson, 2012); implications of resource and energy nationalism in Asia (Herberg, 2011; Parthemore, 2011); Chinese SOEs acquisitions in the oil industry (Paladini & Suresh, 2011).

In 2012, the US, joined by the EU and Japan, filed a lawsuit against China at the WTO on its continued export restrictions and imposition of tariffs. It accuses China of violating articles 1 and 4 of the DSU¹ and the GATT based on its REEs export quota administrations. (CHINA - MEASURES RELATED TO THE EXPORTATION OF RARE EARTHS, TUNGSTEN AND MOLYBDENUM, 2012) The announcement by the administration on the case against China is a stepping move to challenge this bad trade practice. It is, however, unclear whether the fishing trawler incident served as a catalyst for the lawsuit even though a lawsuit had been suggested as early as back in 2009.

"We prefer dialogue. That's especially true when it comes to key trading partners like China." (The White House, 2012)

¹ DSU refers to the *Understanding on Rules and Procedures Governing the Settlement of Disputes*

Despite President Obama's calls on China being a key trading partner highlighting the constructive relationship the two countries share, more and more cases are being brought up against its unfair trade practices. These include the abovementioned state subsidies which help foreign companies sell products at artificially low prices, thus, affecting American businesses. The case of REEs has been exemplar to this state intervention of industry consolidation at the expense of companies competing on the market. In efforts to retain American businesses and jobs without being outsourced, the rationale behind filing this case was claimed to help manufacturers and their supplies of REMs in order to make advanced batteries for commercial purposes. The applications of the batteries in hybrid cars are labelled as pivotal to the US's roadmap to a greener future provided by more efficient and sustainable consumption of energy.

Consequently, China is yet again reduced to be a country which plays a role in a fraction of the green energy cause and is denied a seminal role here despite a joint initiative the two countries agreed upon in 2009. The initiative included a U.S.-China Clean Energy Research Centre (research began in 2011 and headed by DoE), energy efficiency action plan, renewable energy partnership and other cooperative programs. Although the initiative did not include integrated plans for production of specific electric vehicles or hybrids, but it nonetheless inaugurated bilateral interaction which included a workshop in discussion of a battery technology plan, testing procedures and demonstrations of which both sides shared research ideas and experiences.

"[W]e can't let that energy industry take root in some other country because they were allowed to break the rules." (The White House, 2012)

Nonetheless, there are other points of interests which can be discussed with respect to the announcement of this lawsuit. Since it had been clear to the administration that REMs to America is provided by a single source but it does not label China a monopoly power or even the mentioning of REMs as crucial to military technologies that the US war machine depends on. Furthermore, there is an absence of the need to address the dominating Chinese strategy in hoarding the minerals to supply American manufacturers and notable signifiers such as 'monopoly' and 'dependency' or even 'national security' are omitted. The Obama administration's unwitting reserved attitude in not blaming China for its dependency is telling that it does not wish to be drawn into a wider dispute of what already arose two years ago. With the articulation of this monopolistic leverage China enjoys, the administration's response to the fiasco did not seem to concur to a 'crisis'-like attitude of the media and academia portrayed it as. Or even the energy crisis which was very prominent in 1973.

As the world subscribes to the hegemonic discourse of Chinese monopoly, extensive discussions and research devoted in examining the impact of this trade strategy permeates in academic institutions as well as governmental agencies across the globe. The Congressional Research Service provided the majority of the discussions held over various aspects of this Chinese dominance as well as the industry in general in the years after 2012 (Morrison & Tang, 2012; Ly, 2012; Bledsoe, 2012; Grasso, 2013); many of which focus on REEs role in US economy and defence (Atkinson, 2012; Davey, 2012; Bilsborough, 2012). In the midst of this frenzy, Molycorp (the company that bought Mountain Pass, CA) was perhaps the biggest benefactor. Its shares bubbled between 2010 and 2012 before China relaxed its export quotas and tariffs amid further industry consolidation initiatives. As the largest REEs mining company in the US was hopeful in paving the way for securing its domestic production status and ultimately

become the largest producer of light rare earths by 2014, the government's role in securing domestic economic interests based on the idealistic framework of free trade seemed far-reaching as a resolve to alleviate dependency and restore primacy at all fronts.

4.10 Epilogue of the 'crisis': CBS's 60 minutes segment on REEs in 2015

The study of China's REEs industry through the lens of security revealed the saliency of perceived resource scarcity which helped establish a retrocession to Cold-War mentality in the globalised information age. China is signified to be at the locale of the 'lack' in US imaginary through its domination of the rare earths production and supply which could potentially strip the modern world from it because of their commercial applications in high-tech products. Needless to say, the way in which the crisis had been popularised through the studied period (2000 to 2015) did not end with the announcement of the WTO ruling in favour of the complainants. A short-piece documentary from CBS's influential 60 minutes sought to remind or reproduce yet again this threat in spite of the limited re-establishment of the US domestic supply chain since 2011.

The US loss of primacy to Chinese domination and the encroaching dependency was discussed in a trivialised manner in order to bring about a clear understanding of how simple China had made it to be. Or better still, how vulnerable the US has become with unchecked technological transfer.

“Lesley Stahl: So how did they pull it off? What were the factors that allowed them to basically take this away from us?”

Dan McGroarty: Well, the advantage of lower labor costs, would be a place to start. Also, environmentally, very, almost no environmental constraints around mining--safety considerations for the miners doing mining, in huge contrast to the United States. So, that

translates directly into lower pricing. And lower pricing can push other people out of the market.”
(CBS, 2015)

Molycorp's shares soared after the programme was aired (Harden, 2015) in a reinvigorated 'threat' which provided false hopes for the mining company's efforts to provide for America the precious resources it needs. Despite the upper hand in technological know-how and the sophisticated equipment bought by the company in order to arrive at a more efficient way of mining REOs as opposed to previous practices which led to its phase out in the 1990s, the company had yet to make profit and was increasingly coming under serious debt problems. Thus, the government is in actual fact signified to be the lack too. The absence of control and regulation of the industry is also scripted here to be a problem, measures that would aid the indebted mining company to secure part of the domestic supply chain were not considered. Here, it can be noted that previous calls during Congressional hearings have fallen on deaf ears since 2009.

“Lesley Stahl: Do you get any help from the U.S. government? They want to have a rare earth industry here.

Constantine Karayannopoulos: Encouragement, yeah.

Lesley Stahl: Encouragement, that's it?

Constantine Karayannopoulos: Yeah.” (CBS, 2015)

Molycorp is endowed from the 60 minutes segment to be the sole saviour of US national security and is framed to possess the material capabilities for alleviating the dependency problem, thus, restoring US primacy. But nonetheless, the fact that its shares have declined in its production years up to 2015 are worrying signs that the scripted Chinese threat would continue to haunt policy-makers as well as US domestic manufacturers that utilises these resources. The logics of geoeconomics are restated here in the Chinese strategy as well as the lost primacy of America as this cherished industry was 'taken away' by simple market logic. It is something unfathomable for the presenters as well as possibly the general public who view the news-piece because of the perceived complacency of the US government. In return to the scripted geopolitical narrative of this case and the worries that brought with it, an anecdote provided by Kevin Livelli (2015) speaks of the popular geopolitics that the rare earth issues have been associated with over the years since the 2010 crisis as reoccurring theme. These include popular political drama 'House of Cards', spy novel 'Bourne Domination', and video game 'Call of Duty®: Black Ops II', all of which provide a popular imagination of this reoccurring theme that enriches the narrative that the saga had turned out to be. It is unbeknownst as to the reason behind the application of the rare earth resources as recurring themes in these medium. One explanation of it would be the easy association of the high-tech industry being heavily dependent on these elements and their newfound properties and perceived strategic importance given the scripted narrative that was constructed previously as yet another 'scarce' resource prone to conflict. The saturation of these popular medium carrying similar themes propagates the ideological assumptions and paradigmatic thinking behind it. In effect, it perpetuates the conflictual nature that resources bring about to international politics and the scarcity paradigm which helps to inform the public consciousness about the vulnerability of modern conditions

susceptible to irrational, authoritarian countries. The environmental concerns which culminate the shutdown of US domestic production and mining operations had been marginalised, the contributions of REEs towards green technologies are also hidden in popular medium as defence applications arguably ascended to the main focus. This is because these are perceived to be immediate issues because *flashpoints* such as the fishing trawler incident in 2010 were framed in a manner that treated the continuous export reduction not an *a priori* and that they were imposed as an aftermath. This effectively consolidates the 'kneejerk' reaction that many spoke of in relation to China's reactions to the arrest of the trawler crews. The entirety of this saga is captured to be a fast-paced sequence of events similarly to the Hollywood movies which culminate towards conflictual scenarios that pervades in popular culture contributing to geopolitical knowledge and representations.

4.11 Conclusion

The discursive capital had been multiplied since the embargo allegations and China had been assigned as the undermining role and a bogeyman because of the power it possessed. Academic publications over the REEs case flourished and brought awareness to the general public for a period of time. Rare earths are examined and researched within the political spectrum under the scarcity paradigm potentially inciting conflict due to prospects of disruption in supply chain threatening commercial and military applications. In 2014, the WTO ruled in favour of the US against China's justification for imposing export quotas and tariffs which ran inconsistent with its ascension protocols and obligations. China was demanded to retract quotas and allow the distorted trade of REEs to continue in spite of their claimed legitimate domestic concerns over environment, illegal mining and reserves. Nonetheless, this ruling over China's anti-competitive policies is capitalised as a victory for the US.

“We hope this will discourage further breaches of WTO rules that hurt American manufacturers. This victory shows that we stand prepared to take action whenever necessary to protect the high-quality middle class American jobs that trade supports.” (Press office, 2015)

The story of REEs did not end with the subsequent ruling. Since the threat had been consolidated firmly to the realms of public and political life, articulation of this monopoly pervades despite China's reluctant removal of export quotas and tariffs because its share of the market held sway in the years since the beginning of the WTO case in 2012 up to recently. In fact, more questions could be raised with respect to the political and economic consequences of this particular mode of representation. Production of REEs operated in Mountain Pass, CA between 2011 and 2015. The candidate hopeful in re-establishing US domestic supply chain went into bankruptcy in 2015; production and exports of rare earth compounds were suspended. This was the result of price decline since the relaxation of export quotas and tariffs from China. (USGS, 2016) China continued to be the principal exporting country and accounted for 71% of US imports between 2011 and 2014; and it was also the exporter of Yttrium compounds with over 78% share of the imports. (USGS, 2016)

This chapter utilised the methodological proceedings stated in chapter 2 and drew insights of critique over geopolitical thinking in chapter 3. The Chinese monopoly of rare earth was discussed in a procedural manner set within a timeframe with the aim of identifying discursive strategy and the threat gauge that resonated through different discursive practitioners. This analysis encompassed multitudes of actors who contributed to the discursive evidences of reinvigorating US primacy in face of the lack of control over perceived resource scarcity as well as principles of free trade. It began with a cross-examination of rising concern with regards to Chinese domination of the REEs production chain discussed through technical papers and reports

from the USGS. Following this was the identification of media driven discourse in constructing this perceived threat. Noting the threats that China poses, Congressional moves towards domestic industry reestablishment in order fill the 'lack' attributed to realisation of this 'threat'. At the same time, academic publications reinforced the paradigmatic thinking behind scarcity as well as geopolitics of resources that rare earths are understood to be. China's share of the trade was labelled as a dominating strategy at the economic and scientific frontier seeking to choke the West. The convergence of these factors results in the fixation within the overarching discourse of a Chinese challenge to American primacy as explained by conventional wisdom set within the framework of geoeconomics, resource nationalism and traditional geopolitics.

5. Conclusion

This thesis attempted to study the construction of a threat derived from a specific mode of representation and interpretation which is part and parcel to an identity building task. Through this process, modern conditions are scripted to be under threat by an authoritarian country that does not adhere to international trade agreements; its local environment and ecologies are decimated in pursuit of economic growth; neighbouring countries are threatened with economic tools of coercion as political advancement in East Asia. All of the stated issues and problems presented here are argued to be suggestive to the restructuring of identities and specifically the reinforcement of the American teleology of history. The practices of scripting spaces of danger are customary approaches of foreign policy making as contended by Campbell and Ó Tuathail. But the elite inscriptions and media saturation are identified to be equally crucial as representing where danger exists. Evidently, boundary making practices enables separation and clear demarcation of the 'inside' and the 'outside'. These practices are precondition to the rework of an ideology as well as acting reinforcement to the ontologically unstable geomorphic entity that embodies values that are seemingly benign.

This chapter will summarise the main findings of the above analysis in relation to the research questions posed. It will be delivered in three folds: the research questions will be reflected and determined whether they are answered. The main problems encountered during the course of the research will be outlined as noted previously in chapter 2. Finally, some concluding thoughts will be made with respect to the rationale behind choosing this case in attempts to enrich studies in critical geopolitics.

It must be admitted that the 'threat' derived from Chinese monopoly had signified to be a problematic *prior* to the events of September 2010. As a result, the incident can be treated as a

geopolitical flashpoint which is analogous to reinforcing the pre-existing signified threat as discourse. There can be some explanations as to why the flashpoint was deemed more important within this narrative. First, it is the fact that territorial disputes and resource conflict act as exemplary to the aforementioned paradigm that are themselves powerful due to their saliency and effectiveness in explaining conflict as constructed through a linear path. The pacing of which the discourse was driven thanks to the mainstream media helped capture imageries of far-away conflicts with detrimental consequences that affect the modern world. Framing the sequence of events in this particular way enables the capturing of such issues as fast-paced and immediate because of the proximity of this threat to preconditions that governs our dependences on high-tech products in the digital age. Moreover, it is a transcendental feat because of how 'penetrated' these resources are to our lives. Thus, because of its perceived rarity, strategic alignment to foreign policy and manufacturing bases of REEs are linked to oil. This is exemplified with the repetitive citations of Deng Xiaoping's quote saying: "The Middle East has oil. China has rare earths." The quote from the late-Chinese leader is cited as the defining factor behind China's unitary efforts to build its economy through extracting and processing in efforts to modernise the country.

Moreover, the case of REEs discussed here did not include the Chinese perspective. This is due to the fact that the aim of this thesis does not include justifying the policies pursued by Beijing but only to present the traditional narrative at a different angle. Whether or not the industry consolidation is aimed at challenging American key defence industry or importing countries such as Japan over geopolitical disputes was not the defined objective here. Instead, the constructed 'threat' with links to potential flashpoints was deemed more important and this is not to deny the fact that this could hypothetically be a policy option for Beijing.

Nevertheless, the narrative of the US is especially powerful proven by the resolve of the joint-efforts by the US, EU and Japan to file the case at the WTO. Additionally, other perspectives were not analysed here (the EU arguably follows the same discursive line as the US). For example, Japan as the main importer of REEs 'suffered' the immediate fears with respect to continued export quotas. Their reports on the events following the collision were crucial in bringing about the 'frontier' and flashpoint effect that triggered the 'crisis' in the same vein as the 1973 oil embargo. Although the effects of crisis derived from actual embargo was not felt in the US but it still gave rise to the conceptualisation of this 'rarity' and a haunting remark that 'resource scarcity' pervades in the international arena and a crisis in the sense of the scarcity paradigm dictates could ensue.

Since the turn of the millennia, China's share of the REEs global supply chain had risen to the point of being a principal supplier. Given the notion that it is debatable whether global reserves are limited as precipitated, its rise as argued by Jack Lifton was 'given' or handed over by the US because of the domestic shutdown of the industry. Furthermore, despite the historical status of US as dominant supplier, this did not have significant meaning to the current predicaments because the dependency itself is not an *a priori* but an immediate problem rooted in a clearly defined competitor. Nevertheless, because of the historical primacy America had it is constructed by multiple discursive practitioners to be lost or 'taken away' by China's state-capitalist model and ideology that would render supply risks as opposed to neoliberal or free market principles. If Japan was constructed as a potential rivalry in terms of geoeconomics purported by Huntington, China would no-doubt be another 'threat' in terms of resources given that rare earths encompasses other components that affects national security. Aside from economic implications, the scientific sovereignty and American ingenuity is also at stake as the

extraction of the resources are affected by technological know-how and it would later implicate the military-industrial complex in the long-term. This is already accepted to be a grave concern given the wide-coverage of this discourse driven by all three categories found in geopolitical thinking.

Treating Deng Xiaoping's quote on the strategic potential of rare earths reflects on the Mackindersque dictum found in classical geopolitical thinking. This practice, as seen in most cited sources, helps to drive the discursive construction by way of signifying the 'lack', because the US was once the 'monopoly' power means that it no longer has the upper hand in terms of strategic advantage. As Mackinder argued it was the birth of railway transportation which favoured tellurocratic states against thalassocratic states. With the loss of this scientific and industrial primacy with dwindling interest on research, these factors of the REEs are revealed to be major flaws and exposures to American vulnerability. Additionally, because the US maintains the status as the largest military in the world and the reliance of these resources for its arms manufacturers, China could easily be framed to be an existential threat given possible geopolitical contests linked to resources found in the same manner as the 1973 Energy crisis. Thus, "monopoly" as a powerful signifier connotes leveraging power to exert influences for favourable political outcomes. This is because a monopoly can dictate prices, exporting quotas and other attributes it is endowed with as the only source of supply.

In reflection to the case at hand, elites' inscription of danger and potential threats arguably holds true in their contribution towards the discursive field. For example, Cindy Hurst's survey of the origins and process of Chinese strategy in attempts to reveal how American primacy in this particular 'frontier' had been lost. This is powerful in capturing the 'lack' here since rare earths are not only assigned to be affecting national security in the sense of military

capabilities. Rather, this case encompasses also economics (commercial disputes the bilateral relationship is plagued by) and most importantly, the scientific and innovation practices that America champions to be. In spite of global collaborations on reducing carbon emission as well as development of green technologies, rare earths dependency is constructed to be the 'dangerous contest' America is engaged in. Furthermore, in light of the constructed 'threat' that China poses, the ontological instability found in the American identity is at constant reshape here. In addition, the status of the 'LTH' seemed unstable and challenged as demonstrated in the study by Nymalm over Congressional debate over China's currency manipulation. The victory at WTO seemed to salvage this argument and restoration of this particular teleology that had serviced the interests of neoliberal states and their continued relevance in international trade and politics. It is the utmost important for countries like America to uphold these principles in order to reassert their own identity as well as continuing their practice of foreign policy.

The case of discursive representation discussed in chapter 2 had been a lingering problem throughout the process of writing this thesis. Possible drawbacks of encompassing multitudes of sources defined to be representational of signifying the 'lack' as well as driving the discourse continuously include confusion over the extent of their representational strength. For instance, it is unmeasurable when one discusses texts from media sources that do not hold the same influential factors as some. Is the New York Times more influential than other sources such as Voice of America or Reuters News? Furthermore, the fact that the analysis attempts to strictly adhere to sources derived from the US, there were selection of sources that were outside of the US but they were chosen for their connections to specific practices of boundary making through writing spatialisation in a manner fruitful for discussion. Many of the sources available are repetitive to what was previously mentioned already. By picking out specific sources enabled the

discussion to move forward as the discursive construction was driven in a temporal continuum. But because the Congressional hearings as well as submission of legislations over the rare earths industry in the Post-trawler incident cited mostly media sources that began the 'worry' or 'crisis' legitimises the selection of the articles. Hence it was not easy to find the sources that were influential aside from the seemingly repeated citations used in the later coverage and legislations. This is based on the understanding that in order to capture the spirit of critical geopolitics and its customary approach in analysing geopolitical scripts, the three categories practical, formal and popular geopolitics are pooled in the data selection. They enabled the inclusion of a vast expanse of discursive carriers that would help justify their particular mode of representation, all in essence to deconstruct this grand narrative.

The theoretical foundations and methodological proceedings discussed in Chapter 2 were utilised in analysing the stated research questions. Discourse analysis enabled an emancipatory way of studying critically the construction of 'threats' by examining the adoption of one mode of representation. From this, identities are concurrently articulated in a specific way in order to justify interpretation of events and consequently employed by actors to further their interests. Critical geopolitics had been enabling and inspiring to the extent that the customary approaches by listed authors and by example of this thesis to broaden this intellectual enterprise albeit it marked its 20th anniversary recently. Finally, it is hoped that this field could be expanded towards the study of geopolitics and political geography in my city of origin, Hong Kong.

Abstract

This thesis examines the way in which China's share of the rare earths global industry is constructed as a threat. The central argument of the research is that the US discourse presented a new form of danger through the lens of classical geopolitical thinking, thus, creating a new type of prospective conflict derived from resources that are perceived to be scarce and yet relatively abundant. It argues that the construction of this 'threat' that the US faces is a constant articulation of perceived vulnerabilities in shaping geopolitical identities and reinforcing ideologies through which are carried out by different actors.

Rare earths are crucial for modern conditions and their applications include commercial, military and green technology but mining and production are neither economical nor environmentally friendly. The People's Republic of China is the principal exporter of these rare metals, but because of a territorial dispute in the South China Sea in 2010 it has been labelled as a monopoly power. This study seeks to examine the constructed threat that China poses to the US. China, here, is not only constructed to be a resource hungry giant but also a malicious state that would utilise its 'monopoly' status as geopolitical leverage. The thesis will employ discourse analysis and wisdoms of critical geopolitics which provide a critical framework for examining the political consequences of a particular mode of representation. The approaches used here helped to understand how geopolitical identities are repackaged and ideological assumptions that attest to the hegemony of the US of the Post-Cold War era.

Key words: rare earths, critical geopolitics, US discourse, geopolitical identities

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Appendix

List of Abbreviations

CA – State of California (United States)

CDA – Critical Discourse Analysis

CGP – Critical Geopolitics

CREI – Journal of Rare Earth and China Rare Earth Information Journal

DA – Discourse Analysis

DoD – United States Department of Defense

DoE – United States Department of Energy

GATT – General Agreement on Tariffs and Trade

GAO – United States Government Accountability Office

IR – International Relations

LTH – Liberal Theory of History (End of History)

NdFeB – Neodymium-iron-boron

OPEC – Organisation of Petroleum Exporting Countries

PRC – People's Republic of China

REEs – Rare earth elements

REMs – Rare earth materials

REOs- Rare earth oxides

RESTART Act - The Rare Earths Supply Chain Technology and Resources Transformation Act of 2010

SOEs – State owned enterprises (People's Republic of China)

USGS – United States Geological Survey

U.S. – United States of America

USTR – United States Trade Representative

WTO – World Trade Organisation

Rare Earths and their atomic numbers

La – Lanthanum	57
Ce – Cerium	58
Pr – Praseodymium	59
Nd – Neodymium	60
Pm – Promethium	61
Sm – Samarium	62
Eu – Europium	63
Gd – Gadolinium	64
Er – Terbium	65
Dy – Dysprosium	66
Ho – Holmium	67
Er – Erbium	68
Tm – Thulium	69
Yb – Ytterbium	70
Lu – Lutetium	71
Y – Yttrium	39
Sc – Scandium	21

Tables and figures

H 1																	He 2				
Li 3	Be 4															B 5	C 6	N 7	O 8	F 9	Ne 10
Na 11	Mg 12															Al 13	Si 14	P 15	S 16	Cl 17	Ar 18
K 19	Ca 20	Sc 21	Ti 22	V 23	Cr 24	Mn 25	Fe 26	Co 27	Ni 28	Cu 29	Zn 30	Ga 31	Ge 32	As 33	Se 34	Br 35	Kr 36				
Rb 37	Sr 38	Y 39	Zr 40	Nb 41	Mo 42	Tc 43	Ru 44	Rh 45	Pd 46	Ag 47	Cd 48	In 49	Sn 50	Sb 51	Te 52	I 53	Xe 54				
Cs 55	Ba 56	La 57	Hf 72	Ta 73	W 74	Re 75	Os 76	Ir 77	Pt 78	Au 79	Hg 80	Tl 81	Pb 82	Bi 83	Po 84	At 85	Rn 86				
Fr 87	Ra 88	Ac 89																			

Lanthanides

Ce 58	Pr 59	Nd 60	Pm 61	Sm 62	Eu 63	Gd 64	Tb 65	Dy 66	Ho 67	Er 68	Tm 69	Yb 70	Lu 71
Th 90	Pa 91	U 92	Np 93	Pu 94	Am 95	Cm 96	Bk 97	Cf 98	Es 99	Fm 100	Md 101	No 102	Lr 103

Figure 1. Barrett, S. D., & Dhesi, S. S. Adapted from: *The Structure of Rare-earth Metal Surfaces*. World Scientific. 2001



Figure 2. *Jingbing tang.* Adapted from: *China's Rare Earths ferociously sold overseas. National Strategy has failed.* Retrieved from Wangyi Junshii.

<http://war.163.com/photoview/4T8E0001/76332.html#p=A9D2I8SB4T8E0001>

Caption translated: Since September of 2008, prices of Cerium with purity of 99.9% dropped from \$4.6/kg to \$2.8/kg. Dong Senhua said: High-tech products, lasers, communications all require rare earths. But China's rare earth prices was not consistent with actual production costs and the country does not set the price itself. It is losing out.

China's rare-earth production, consumption, and export quotas for 2000 through 2011.

[In metric tons of rare-earth-oxide (REO) equivalent except as described in footnote 1. Abbreviations used: est., estimated; MIIT, China Ministry of Industry and Information Technology; MLR, China Ministry of Land and Resources; NA, not available. Sources: China Ministry of Commerce (2006, 2008a,b, 2009, 2010a,b,c)]

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Production quota	MIIT									119,500	110,700	89,200	NA
	MLR	55,000	NA	NA	NA	NA	NA	86,620	87,020	90,180	87,620	89,200	NA
Production	(est.)	73,000	81,000	88,000	92,000	98,000	119,000	133,000	120,000	125,000	129,000	120,000	NA
Consumption	(est.)	19,000	20,000	22,000	30,000	34,000	52,000	63,000	73,000	67,700	73,000	77,000	NA
Export quota	Domestic producers and traders ¹	47,000	45,000	NA	40,000	45,000	48,010	45,000	43,574	34,156	31,310	22,512 ²	14,446 ³
	Sino-foreign joint ventures ¹	NA	NA	NA	NA	NA	17,570	16,070	16,069	15,834	16,845	7,746 ⁴	

¹Export quotas are in gross weight rather than REO content for domestic producers and traders and Sino-foreign producers in 2005 and later years.

²Total export quota for 22 domestic producers and traders.

³Export quota for 2011 is only for the first tranche for 31 domestic producers and traders and Sino-foreign joint-venture producers.

⁴Total export quota for Sino-foreign producers.

Figure 3. Tse, P.-K. Adapted from: *China's Rare-Earth Industry*. Virginia: U.S. Geological Survey. 2010



Figure 4. *Everett.* Adapted from: Satellite photo of Bayan Obo mining area and its 'Lake of colourful toxics', 2012, Retrieved from: <http://tech.qq.com/a/20120425/000136.htm>

Caption: 2006-6-30 satellite photo over Bayan Obo

World production and reserves of rare earth elements minerals in 2009.				
[In 2009, China produced 95 percent of world rare earth elements although it had only 36 percent of rare earth elements reserves. TREO, total metric tons of rare earth oxides]				
Country	2009			
	Production		Reserves	
	TREO (metric tons)	Share (percent)	TREO (metric tons)	Share (percent)
Australia	0	0	5,400,000	5
Brazil	650	0.5	48,000	0.05
China	120,000	95	36,000,000	36
Commonwealth of Independent States	2,500	2	19,000,000	19
India	2,700	2	3,100,000	3
Malaysia	380	0.3	30,000	0.03
United States	0	0	13,000,000	13
Other	0	0	22,000,000	22
Total	126,230		99,000,000	

Figure 5. Long, K., Van Gosen, B., Foley, N., & Cordier, D. *The Principal Rare Earth Elements Deposits of the United States - A Summary of Domestic Deposits and a Global Perspective*. Virginia: U.S. Department of the Interior & U.S. Geological Survey, 2010

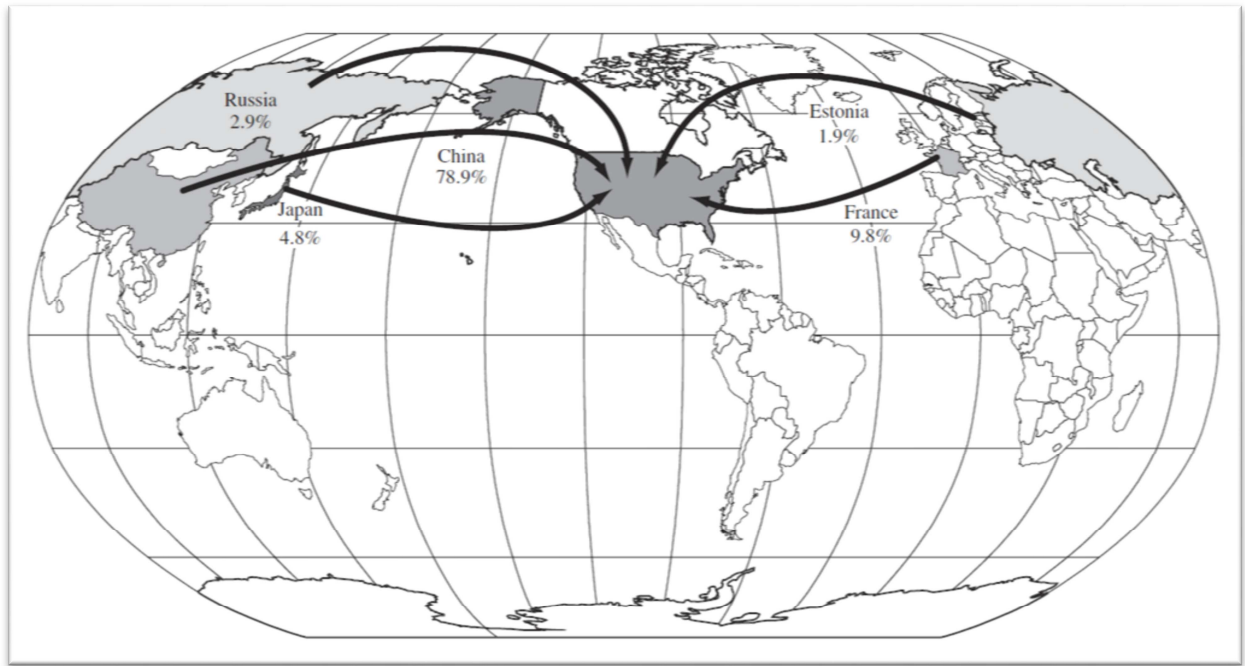


Figure 6. Hedrick, J. *Rare earths*. Virginia: USGS. 2004

Caption: Principal sources, by weight, of U.S. Imports of Rare Earths in 2004

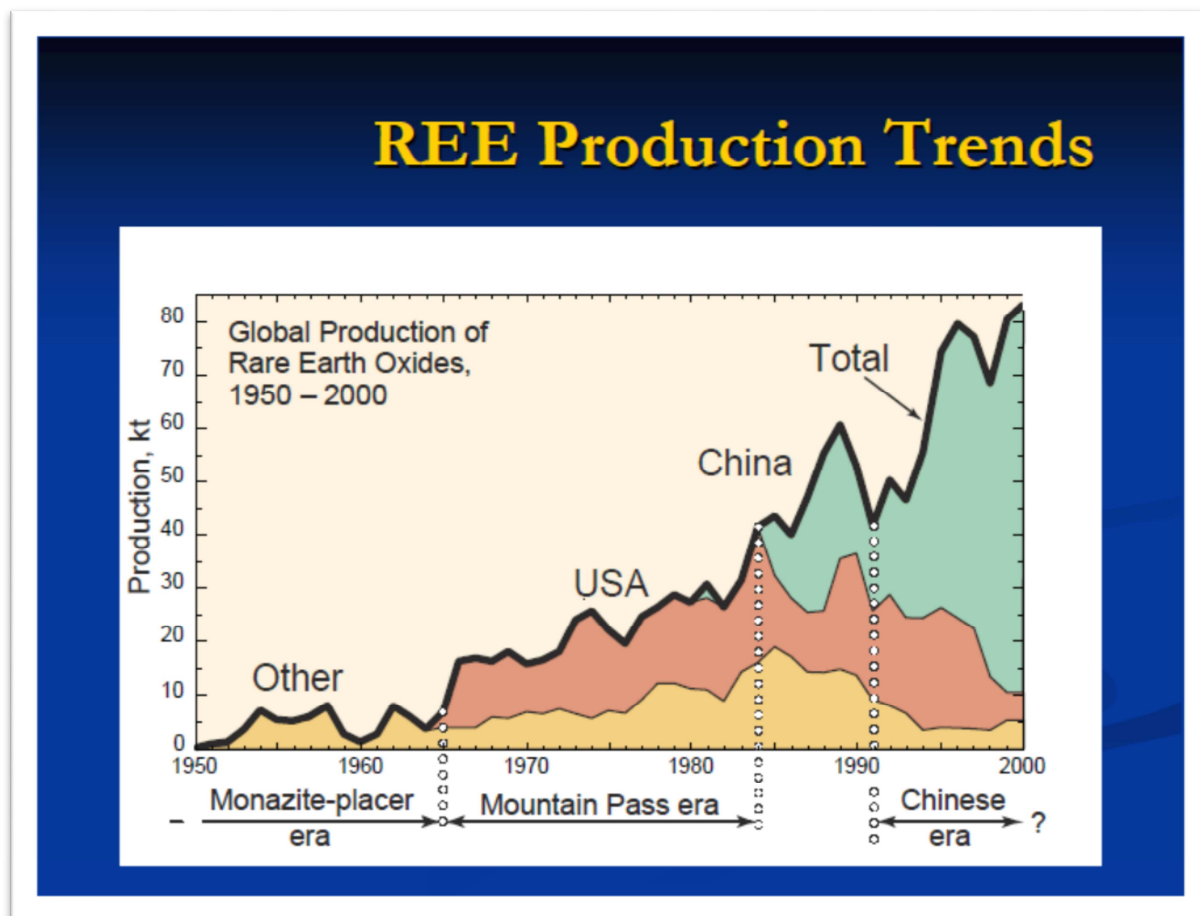


Figure 7. Hedrick, J. *Rare-earth Industry Overview & Defense Applications*. Reston: USGS & US Department of Interior. 2005

Short Term	Medium term
Critical	Critical
<ul style="list-style-type: none"> • Dysprosium • Europium • Neodymium • Terbium • Yttrium 	<ul style="list-style-type: none"> • Dysprosium • Europium • Neodymium • Terbium • Yttrium
Near-Critical	Near-Critical
<ul style="list-style-type: none"> • Cerium • Indium • Lanthanum • Tellurium 	<ul style="list-style-type: none"> • Lithium • Tellurium
Not Critical	Not Critical
<ul style="list-style-type: none"> • Cobalt • Gallium • Lithium • Manganese • Nickel • Praseodymium • Samarium 	<ul style="list-style-type: none"> • Cerium • Cobalt • Gallium • Indium • Lanthanum • Manganese • Nickel • Praseodymium • Samarium

Figure 8. U.S. Department of Energy. *Critical Materials Strategy*. Washington D.C.: U.S.

Department of Energy, 2011. P.116